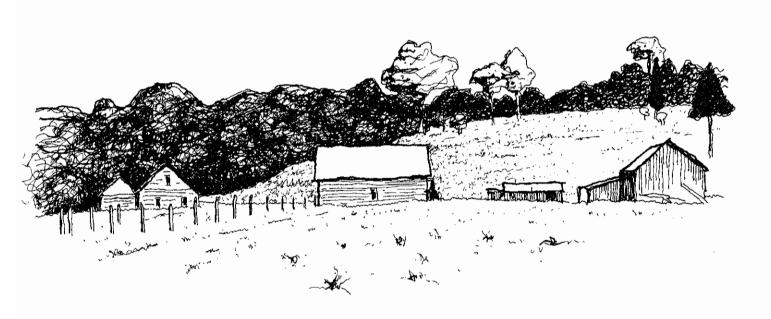
Tending a 'Comfortable Wilderness'

A History of Agricultural Landscapes on North Manitou Island, Sleeping Bear Dunes National Lakeshore, Michigan

Eric MacDonald
with
Arnold R. Alanen



SCANNED

12/12/01

PLEASE RETURN TO:

TECHNICAL INFORMATION CENTER
DENVER SERVICE CENTER
NATIONAL PARK SERVICE



U.S. Department of the Interior National Park Service Midwest Field Office Omaha, Nebraska

2000

Tending a 'Comfortable Wilderness'

A History of Agricultural Landscapes on North Manitou Island, Sleeping Bear Dunes National Lakeshore, Michigan

Eric MacDonald
with
Arnold R. Alanen

University of Wisconsin-Madison Department of Landscape Architecture

U.S. Department of the Interior National Park Service Midwest Field Office Omaha, Nebraska

Preface

This project builds upon three previous studies of historic agriculture at Sleeping Bear Dunes National Lakeshore (SBDNL). These have focused on: (1) an overview of the agricultural and settlement history of the two-county SBDNL region; (2) an assessment of the agricultural landscapes and cultural resources at Port Oneida, an important part of the lakeshore's mainlan unit; and (3) an assessment of agricultural and cultural resources on South Manitou Island. This report examines agricultural and cultural resources on North Manitou Island.

Like nearby South Manitou Island, Euro-American settlement on North Manitou preceded such activities on the mainland. Agriculture was evident on the island as early as the 1850s, and additional agriculturists arrived during the 1870s and 1880s after the cessation of logging for cordwood. A distinctive facet of North Manitou's early agricultural history is the high proportion of Scandinavian immigrants in the population. Although little remains of the original buildings and field patterns from the nineteenth century, homestead records and the manuscript schedules for the agricultural and population censuses served to document previous activities.

Few structures remain in the backcountry areas of North Manitou, although a number of extant structures are located in the island's principal village. Several of these structures have been documented in previous efforts. Whenever possible and necessary, accounts of the historic villages, and their buildings, were incorporated into and discussed as part of the overall agricultural and settlement history. The project comprised the following objectives:

- (1) To trace the evolution and determine the over all significance of agricultural, settlement, and ethnic patterns on North Manitou Island.
- (2) To make detailed assessments of the homestead claims and, when documentation permits, trace the evolution of these homestead properties through time.
- (3) To undertake a detailed and thorough study of North Manitou's orchard operations, especially those associated with the Manitou Island Association, since this facet of corporate agriculture may have been most repsonsible for shaping the island's cultural landscape.
- (4) To document, to the extent possible, the extant agricultural features that still remain or are discernable on North Manitou Island.
- (5) To link, whenever possible, those structures and landscapes associated with resorts, life saving, fishing, and other activities to the history of agriculture on the island.
- (6) To evaluate the significance and integrity of extant structures and landscapes on North Manitou within the context of island agricultural history and development.
- (7) To recommend priorities for preserving the identified resources that may be considered by Lakeshore management.

In pursuit of these objectives, the project also intended to identify those relict agricultural features on North Manitou Island that appear to meet the criteria for inclusion in the National Register of Historic Places, and those resources that possess high potential for interpretation. Building upon the List of Classified Structures and Cultural Landscape Inventory prepared by NPS staff members in 1993 and 1994, documentation of the island's cultural landscapes, buildings, and structures was undertaken using accepted fieldwork techniques. Additional inventories and sources provided by lakeshore staff members and others were utilized. When sufficient evidence remained, measured drawings were made of extant buildings and structural remnants, along with the documentation of landscape features. In assessing the integrity and significance of the resources, comparisons were made, whenever possible, with the two other agricultural areas of the lakeshore that have been documented: Port Oneida and South Manitou Island. As at South Manitou, North Manitou's island setting required that special emphasis be given to such unique environmental characteristics as climate, soils, and vegetation.

Eric MacDonald
Arnold R. Alanen
Madison, Wisconsin

Acknowledgements

Many people contributed time, energy, and talent to the successful completion of this project. Sherda Williams, of the National Park Service (NPS), Midwest Field Office, in Omaha, Nebraska, provided essential guidance, inspiration, and advice throughout the course of the study. We are grateful also for the input and assistance provided by other professionals at the NPS Midwest Field Office, including Ellen Goldkyn, James Hill, Marla McEnaney, Theora McVay, Dena Sanford, and Michelle Watson. Our research would not have been possible without the cooperation and assistance provided by the Ivan Miller, Superintendent of Sleeping Bear Dunes National Lakeshore (SBDNL) in Empire, Michigan. Other members of the SBDNL staff who provided valuable assistance include North Manitou Island rangers, especially Dave Hooper. SBDNL Historical Architect Kim Mann deserves special recognition for assistance with research sources and logistics, and for her encouragement and tireless enthusiasm for the project. Laura Quakenbush, of the Leelanau County Museum, likewise provided valuable research assistance throughout the course of the study

A number of people helped us develop specific aspects of the research. Dean Anderson, John Halsey, and Barbara Mead of the Office of the State Archaeologist, Michigan Historical Center, contributed information and useful insights about prehistoric human occupation of North Manitou Island and the Sleeping Bear Dunes region. We are indebted to Ted Karamanski for alerting us to the existence of the John Newhall Collection of historic North Manitou Island photographs at the Chicago Maritime Society. Three former North Manitou Island residents provided valuable information and

insights: Paul Maleski, Jr., Giles Merrit, and Rita Hadra Rusco. We are especially grateful to Rita Hadra Rusco for freely sharing her memories and personal collection of island photographs, and for her hospitality during the fieldwork phase of the project. James Walle, Alan Green, Carol Drew Sanctorum contributed information about the Hendrick Frederickson, John O. Anderson, and Philip Droy families, respectively. Lastly, at the University of Wisconsin-Madison, we are indebted to Ann Kozich of the Institute for Environmental Studies for expert administrative assistance, to Katie Franks for assistance with the report graphics, to Deborah Levin for offering layout advice and PageMaker expertise, and to Kirsten Lombard for transcribing the North Manitou Island census manusripts.

Table of Contents

Prefaceiii
Acknowledgementsv
Table of Contentsvi
List of Illustrations and Tablesviii
Chapter 1
Introduction
Chanton 2
Chapter 2 An Overview of North Manitou Island's Settlement History
All Overview of North Mankou Island's Settlement History
Chapter 3
Cultivating a Comfortable Wilderness
Chapter 4
Description and Analysis of Individual Sites
Chapter 5
National Register of Historic Places Evaluations
Chapter 6
Cultural Landscape Management Recommendations
Chapter 7
A Paradoxical Wilderness
Appendices347
Bibliography409
Figure Sources415

Figures

List of Illustrations and Tables

- G			
Chapter 1	Figure 1.1	Location of the Study Area in the Upper Midwest	2
	Figure 1.2	Sleeping Bear Dunes National Lakeshore region	2
	Figure 1.3	Major Physical and Cultural Features of North Manitou Island	5
Chapter 2	Figure 2.1	Soil Associations of North Manitou Island	10
	Figure 2.2	Canadian and Carolinian Biotic Provinces	15
	Figure 2.3	American Indian Subsistence Strategies	16
	Figure 2.4	American Indian Settlements, Leclanau Peninsula, ca. 1830	20
	Figure 2.5	Euro-American and American Indian settlement areas, ca. 1830	22
,	Figure 2.6	North Manitou Island Township and Section Locations	26
	Figure 2.7	Cord-wood clearings and structures on North Manitou Island,	
		1847	29
	Figure 2.8	Unidentified North Manitou Island farmstead, ca. 1880	33
	Figure 2.9	Silas R. Boardman farmhouse, ca. 1920	34
	Figure 2.10	Postcard view of boardwalk, North Manitou village	36
	Figure 2.11	Hotel, North Manitou Island, ca. 1910s	37
	Figure 2.12	Howard W. Foote cottage	37
	Figure 2.13	Coastal sand dunes, western side of North Manitou Island	39
	Figure 2.14	Title page, Botanital Gazette 27, 1899	41
	Figure 2.15	North Manitou Island forest, early twentieth century	42
	Figure 2.16	North Manitou Village dock road, ca. 1900	46
	Figure 2.17	Mary McMunn Bournique on "Old Sparkie"	47
	Figure 2.18	Crescent, North Manitou Island, ca. 1908	48
	Figure 2.19	Smith & Hull narrow-gauge railroad, near Crescent	48
	Figure 2.20	North Manitou Island men's baseball team, Crescent	
	Figure 2.21	Logs piled near North Manitou Island dock, ca. 1910s	
	Figure 2.22	William R. Angell	

Representatives of the National Industrial Recreation Association

Figure 2.23

Figure 2.24

Figure 2.25

Figure 2.26

Figure 2.27

Figure 2.28

Figure 2.29	North Manitou Island Vegetation Cover		
Figure 2.30	Abandoned automobile, Stormer lumber camp site		
Figure 2.31	Trail, North Manitou Island, 1995	67	
Figure 2.32	Tamarack Lake, ca. 1910	70	
Figure 3.1	North Manitou Island Homestead Entries, 1875-1912	77	Chapter 3
Figure 3.2	Unidentified North Manitou Island Farm, ca. 1900	79	
Figure 3.3	Frederic Beuham apple orchard, 1913	80	
Figure 3.4	Henderick Frederickson farm, ca. 1900	81	
Figure 3.5	Apple packing crew, North Manitou Island, ca. 1910s	83	
Figure 3.6	Orchard workers, ca. 1910s	84	
Figure 3.7	The "big field" near Crescent town site, ca. 1910	86	
Figure 3.8	Herman Prause at the Newhall family farm, ca. 1910	87	
Figure 3.9	Construction of Manitou Island Association barn, North		
	Manitou Village, 1927	89	
Figure 3.10	Members of the MIA barn construction crew, 1927	89	
Figure 3.11	Haystacks at MIA west-side farm	90	
Figure 3.12	Cattle at MIA corral near the village dock	91	
Figure 3.13	Louis Halsted collecting maple sap for the MIA, ca. 1928	94	
Figure 3.14	MIA cherry orchard workers, ca. 1928		
Figure 3.15	Manitou Island Association store, 1925		
Figure 3.16	Maple syrup label, ca. 1960s		
Figure 3.17	Loggers at North Manitou Island, ca. 1910		
Figure 3.18	North Manitou Village dock, ca. 1930		
Figure 3.19	John Newhall and "Mr. Thompson," ca. 1900		
Figure 4.1	Sites Associated with Historic Agricultural Activities on North		
0	Manitou Island		Chapter 4
Figure 4.2	North Manitou Village, key to detailed site plans		
Figure 4.3	Farm employees of the Newhall family, ca. 1910		
Figure 4.4	"The Farmhouse," ca. 1910s		
Figure 4.5	Construction of Manitou Island Association barn, North		
	Manitou Village, 1927	115	
Figure 4.6	North Manitou Village and Manitou Island Association Farm		
	Complex	117	
Figure 4.7	North Manitou Village, spatial organization, 1997		
Figure 4.8	Clearing east of North Manitou Village and Manitou Island		
ragaic	Association Farm Complex	119	
Figure 4.9	Former North Maniton Village dock road		
Figure 4.10	Site Plan of the Manitou Island Association Office and		
1 iguic 4.10	Campbell House	120	
Figure 4.11	MIA equipment shed and staging area		
•	nd Association barn and equipment shed (9:25)		
Figure 4.12	Site Plan of the Manitou Island Association Farm Complex,		
riguic 4.12	North Manitou Village	122	
E:: 4 1 2			
Figure 4.13	NPS photovoltaic (PV) array		
Figure 4.14		174	
	Manitou Island Association barn		
Figure 4.15	MIA barn, "fire hall," and threshing machine	125	
Figure 4.16	MIA barn, "fire hall," and threshing machine		
	MIA barn, "fire hall," and threshing machine	125 125 126	

Figure 4.19	MIA office building	
Figure 4.20	Campbell house	128
Figure 4.21	Belgian draft horses grazing in front of the Campbell house,	
	ca. 1900	
Figure 4.22	Campbell house and Newhall farmhouse, ca. 1900	
Figure 4.23	MIA Sawmill	129
Figure 4.24	Privy near MIA sawmill	129
Figure 4.25	MIA "Rules and Regulations"	132
Figure 4.26	Site Plan of the MIA Orchard workers' Cabins	
Figure 4.27	Manitou Island Association cherry picker's cabin	135
Figure 4.28	"Homemade threshing machine," Peter Swanson farm, ca. 1900	137
Figure 4.29	Cresent "meat market" and "barber shop," ca. 1940	138
Figure 4.30	Peter and Eleanor Oicn family, ca. 1940	139
Figure 4.31	Site Plan of the Manitou Island Association West-Side Farm	140
Figure 4.32	Site of the former A. J. White & Son sawmill, Crescent town site	141
Figure 4.33	"Barber shop," Crescent town site	142
Figure 4.34	MIA west-side barn, northern and western facades	143
Figure 4.35	MIA west-side barn, southern and eastern	143
Figure 4.36	MIA west-side barn, ground floor plan	144
Figure 4.37	MIA west-side barn, milking stanchions	145
Figure 4.38	Alvar and Mary Bournique residence, ca. 1903	
Figure 4.39	Alvar and Mary Bournique, ca. 1928	
Figure 4.40	Alvar and Mary Bournique farm, ca. 1910	
Figure 4.41	General Site Plan of the Alvar and Mary Bournique Farm, 1938	
Figure 4.42	Bournique residence, landscape setting	
Figure 4.43	Blowout near Bournique residence	
Figure 4.44	Roadway connecting Bournique residence and farm buildings	
Figure 4.45	Site Plan of the Alvar and Mary Bournique Residence Complex	
Figure 4.46	Site Plan of the Alvar and Mary Bournique Farm Buildings	
J	Complex	154
Figure 4.47	Cottonwood windbreak	
Figure 4.48	Bournique large log barn, concrete foundation and water troughs	155
Figure 4.49	Bournique small log barn ruin	
Figure 4.50	Bournique small log barn ruin, wall construction detail	
Figure 4.51	Bournique small log barn ruin, notching detail	
Figure 4.52	Bournique residence, eastern elevation	
Figure 4.53	Sketch plan of the Alvax and Mary Bournique residence	
Figure 4.54	Sketch plans of archetypal Gulf Coast Side-gable Creole Houses	
Figure 4.55	Bournique residence, southern elevation	
Figure 4.56	Bournique ice house	
Figure 4.57	Bournique privies	
Figure 4.58	Bournique automobile garage	
Figure 4.59	Site Plan of the Mads and Gertrude Nerland / John and Ildri	
	Anderson Farmstead	168
Figure 4.60	Mads and Gertrude Nerland / John and Ildri Anderson house	
-0	nún	169
Figure 4.61	Sketch plan of the Mads and Gertrude Nerland house ruin	
Figure 4.62	Adam Maleski fishing camp. ca. 1910	
Figure 4.63	Mary Maleski at the Maleski "pioneer" house, ca. 1920s	

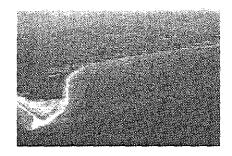
Figure 4.64	Paul and Josephine Maleski family, ca. 1920s	175
Figure 4.65	Paul Maleski and draft horse, "Prince," ca. 1920s	
Figure 4.66	Site plan of the Adam and Mary Maleski farmstead	
Figure 4.67	Adam and Mary Maleski farm cleaning	
Figure 4.68	Apple trees, Adam and Mary Maleski farm	
Figure 4.69	Frank Maleski gravesite and pear tree	
Figure 4.70	Paul and Josephine Maleski house ruin	
Figure 4.71	Peter Stormer and logging sled, ca. 1910s	
Figure 4.72	Peter Stormer family, ca. mid-1910s	
Figure 4.73	Peter Stormer Farm, ca. 1910s	
Figure 4.74	Peter Stormer farm clearing	
Figure 4.75	Site plan of the Lars Christian Alstrom Homestead / Peter	
Ü	Stormer farm	185
Figure 4.76	Sketch plan of the Lars Christian Alstrom / Peter Stormer house	
	nuin	187
Figure 4.77	Lars Christian Alstrom / Peter Stormer house ruin	
Figure 4.78	Lars Christian Alstrom / Peter Stormer house, notching detail	
Figure 4.79	Nels and Sophia Carlson farm house, ca. 1900	
Figure 4.80	Nels and Sophia Carlson farm clearing	
Figure 4.81	Nels and Sophia Carlson shed ruin	
Figure 4.82	John and Anna Maleski farmstead site	
Figure 4.83	Nurserymen J. H. Hale and William Stark at North Manitou	
•	Island, ca. 1900	197
Figure 4.84	General site plan of the Frederic Beuham orchard	
Figure 4.85	Aerial view of the Frederic Beuham orchard	
Figure 4.86	Frederic Beuham orchard landscape setting	
Figure 4.87	Fruit trees, Frederic Beuham orchard	
Figure 4.88	Frederic Beuham orchard, National Park Service radio tower	
Figure 4.89	Hendrick Frederickson bouse and wharf, 1897	
Figure 4.90	Cultural vegetation at the Hendrick Frederickson place	
Figure 4.91	John L. Johnson farm house	
Figure 4.92	"Fat Annie's" place	
Figure 4.93	Feilen brothers making maple syrup on North Manitou Island	210
Figure 4.94	Lumber camp, ca. 1908-1915	
Figure 4.95	Stormer logging camp site	213
Figure 4.96	U.S. government lighthouse at North Manitou Island, ca. 1900	
Figure 4.97	U.S. Life-Saving Station and Cottage Row, ca. 1900	214
Figure 4.98	U.S. Coast Guard Station, North Manitou Island, ca. 1930	215
Figure 4.99	Site plan of the North Manitou Island Life-Saving Station	
	complex	217
Figure 4.100	Hans Halseth house	218
Figure 4.101	1854 Volunteer Rescue Station beach cart house, north elevation	218
Figure 4.102	U.S. Life-Saving Service Dwelling and large lilac shrub	219
Figure 4.103	Root cellar and Lombardy poplar trees	
	Cottage Row boardwalk, ca. 1900	
~	Women posed on the front porch of the hotel, ca. 1900	
•	Members of the Cottage Row summer resort community, 1900	
-	Cottage Row "Culinary Dept.," 1900	
J	Second Howard Foote cottage ca 1901	227

F	igure 4.109	General Site Plan of Cottage Row	. 224
F	igure 4.110	Cottage Row, lots 1-5	. 22 5
F	igure 4.111	Chester Maleski at Katic Shepard's hotel, ca. 1925	. 226
F	igure 4.112	Katie Shepard hotel	. 227
F	igure 4.113	Hewitt cottage, 1904	. 228
F	igure 4.114	Roderick and Margaret (Rhoades) Peattie treehouse	. 228
F	igure 4.115	George and Carrie Blossom cottage, "Tanglewood"	. 229
F.	igurc 4.116	George and Carrie Blosson cottage ruin	. 230
F	igure 4.117	Frederick H. and Mary Trude cottage, front elevation	. 231
	_	Floor plan of a Dog-trot House	
F:	igure 4.119	Frederick H. and Mary Trude cottage, rear elevation	. 232
	_	Frederick H. and Mary Trude water cistern and outbuildings	
	-	Howard W. Foote cottage	
F	igure 4.122	Cottage Row, lots 6-10	. 235
	•	Margaret Riggs cottage	
	~	Margaret Riggs cottage, entrance detail	
	_	Shirley Foote Alford cottage and migrant orchard workers' cabin	
		Migrant orchard workers' cabin	
	_	Monte Carlo cottage and Cottage Row hotel, ca. 1900	
		Monte Carlo cottage and hotel site plan	
	_	Monte Carlo cottage	
	-	John Newhall cottage, ca. 1900	
	_	Lombardy poplar trees at site of the former Newhall cottage	
		John Newhall cottage, landscape setting	
		John Newhall cottage site plan	
		John Newhall cottage, western elevation	
	igurc 5.1	North Manitou Island's eastern shoreline	
	igure 5.2	Manitou Island Association map. ca. 1940s	
	igure 5.3	Smith & Hull Lumber Co. narrow-gauge railroad spur, ca. 1908	
	_	Tree stump, northeastern North Manitou Island	
	igure 5.5	Large log barn on North Manitou Island, location and date	20 1
•	дшс <i>3.</i> 3	unknown	255
a	igure 5.6	Manitou Island Association deer blind	
	igure 5.7	Agriculural clearing at the former MIA west-side farm	
	igure 5.8	Aerial view of North Manitou Village	
	igure 5.9	U.S. Life-Saving Service complex viewed from the village dock	207
Α.	<u>Б</u> тс 3.3	road	260
1 2	igure 5.10	North Manitou Village dock and wharf, ca. 1900	
	igure 5.10	Map of North Manitou Village showing historic district	201
	iguic J.11	boundaries	262
Ti	igure 5.12	Aerial photograph of North Manitou Village, 1938	
	Ū	Manitou Island Association sawmill	
	igure 5.13	Manitou Island Association barn	
	igure 5.14		200
r	igure 5.15	North Manitou Island U.S. Life-saving Service complex and NPS road	269
	imre E 16	U.S. Life-saving Service complex site plan	
	igure 5.16		
	igurc 5.17	Woman washing clothes, ca. 1900	
	igure 5.18	Passenger ship Puritan at North Manitou Island	
F	igure 5.19	Summer resorters at Cottage Row boardwalk, ca. 1900	2/1

Figure 5.20	Frederick H. and Mary Trude cottage		
Figure 5.21	Boundaries of proposed Cottage Row Historic District		
Figure 5.22	Relict apple orchard at Alstrom/Stormer farm site		
Figure 5.23	Rows of apple trees, Frederic Beuham orchard		
Figure 5.24	Alvar and Mary Bournique residence and ice house	279	
Figure 5.25	Beach and dunes along the western shoreline of North Manitou	***	
	Island		0 1
Figure 6.1	Tent at John and Anna Maleski homestead clearing		Chapter 6
Figure 6.2	Manitou Island Association sign, ca. mid-1980s		
Figure 6.3	John Newhall cottage, ca. 1910		
Figure 6.4	John Newhall cottage interior		
Figure 6.5	Lombardy poplar grove near MIA sawmill	316	
Figure 6.6	Mads and Gertrude Nerland / John and Ildri Anderson house		
	ruin		C'
Figure 7.1	Manitou Island Association placemat, ca. 1950		Chapter 7
Figure 7.2	Manitou Island Association brochure, ca. 1960s		
Figure 7.3	Paul and Josephine Maleski house ruin, window detail	335	
Figure 7.4	Woman posing near a ruined log structure, North Manitou		
	Island, ca. 1900		
Figure 7.5	Paul and Josephine Maleski house ruin, porch detail		
Figure 7.6	Katic Shepard hotel dinning room		
Figure 7.7	Eastern shore of Lake Manitou		
Figure 7.8	Boathouse, Lake Manitou, ca. 1910	341	
Figure 7.9	Dock and wharf, North Manitou Village, ca. 1910s		
Figure 7.10	Former logging road	342	
Figure 7.11	Postcard image of a painting of Lake Manitou, ca. 1900	344	
			Tables
Table 4.1	Crops produced by Nicholas Feilen on his North Manitou		1 aoies
12010 4.1	Island Homestead, 1904-1908	200	Chapter 4
Table B-1	Possible American Indian uses of native plant species found on		
12DIC D-1	North Manitou Island	256	Appendix B
25-1-1- C 1	Culturally significant non-native plant species on North Manitou		Appendix B
Table C-1	Island	362	Appendix C
T-blo D 1	Federal census of population, North Manitou Island, 1860		Appendix D
Table D-1			Tippettes 12
Table D-2	Federal census of population, North Manitou Island, 1870		
Table D-3	Federal census of population, North Manitou Island, 1880		
Table D-4	Federal census of population, North Manitou Island, 1900		
Table D-5	Federal census of population, North Manitou Island, 1910		
Table D-6	Federal census of population, North Manitou Island, 1920		Annadia I
Table E-1	Federal census of agriculture, North Manitou Island, 1860		Appendix E
Table E-2	Federal census of agriculture, North Manitou Island, 1870		
Table F-1	State of Michigan, census of agriculture, North and South	207	1 12 T
	Manitou Islands, 1894	396	Appendix F

	Table G-1	Farmstead characteristics of North Manitou Island's homestead	
Appendix G		claimants	398
	Table H-1	Manitou Island Association income directly attributable to sales	
Appendix H		of commodities and services, 1925-1929	401
	Table H-2	Manitou Island Association annual expenditures for labor,	
		1925-1929	401
	Table H-3	Manitou Island Association monthly expenditures for labor,	
		1925-1929	402
	Table H-4	Persons listed in the Manitou Island Association's monthly	
		payrolls, 1925-1929	403
	Table H-5	Maniton Island Association cheery horzest crows 1927-1929	406

Introduction



In 1984 the National Park Service acquired North Manitou Island as part of Sleeping Bear Dunes National Lakeshore in northwestern lower Michigan (figures 1.1 and 1.2). North Manitou is the second-largest island in a fourteen-island archipelago in northeastern Lake Michigan. It lies approximately eleven miles off-shore from the coastal town of Leland, the closest mainland harbor. Approximately five miles wide at its greatest breadth, and seven miles long, the island's land area encompasses just under 15,000 acres. It is a landscape of rolling hills, steep bluffs and sand dunes, two inland lakes, fragile wetland habitats, and thousands of acres of deciduous forests of maple, beech, white birch, and black cherry. Situated within this spectacular natural setting are striking and enigmatic traces of human habitation. Vestiges of human history on North Manitou Island include abandoned townsites, remnant logging camps, empty summer cottages, relict fruit orchards, and deserted farmsteads—exemplars of a geographical concept termed the cultural landscape.

A cultural landscape embodies the ways in which a group of persons or a community has altered, utilized, and maintained the natural and cultural resources in a given area. In the broadest sense, a cultural landscape reflects human adaptation and use of natural resources through the ways in which land is organized and divided, patterns of settlement and land use, the manipulation of ecosystems, systems of movement and transport, and architectural construction. Humans modify environments in response to economic, aesthetic, spiritual, associative or mnemonic, and many other motivations. Thus, landscapes also are a medium for expressing a diverse matrix of cultural values. The tangible character of a cultural landscape is

¹ R. H. Ruchhoft, Exploring North Manitou, South Manitou, High and Garden Islands of the Lake Michigan Archipelago (Cincinnati: Pucelle Press, 1991), 161.



Figure 1.1. Location of Sleeping Bear Dunes National Lakeshore in the upper Midwest.

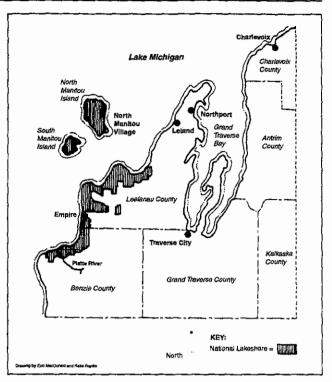


Figure 1.2. Sleeping Bear Dunes National Lakeshore Region.

defined both by physical attributes—landforms, roads, vegetation, buildings—and by on-going natural processes and human activities, which reflect cultural values and traditions. Indeed, continuity of land uses and associative values by a cultural group may be as important as any physical or aesthetic attributes of the landscape. Likewise, the continuity of non-human, natural processes serves a crucial function in maintaining the functional and aesthetic integrity of a cultural landscape.

Our understanding of cultural landscapes has evolved from the work of geographers and historians who have probed the relationships between human culture and nature in shaping the built environment. The concept was concisely defined more than seventy years ago by geographer Carl Ortwin Sauer: "The cultural landscape is fashioned from a natural landscape by a culture group. Culture is the agent," he noted, "the natural area is the medium, the cultural landscape the result." Only within the last two or three decades, however, has the scholarship pioneered by Sauer served as a basis for preserving and interpreting historically significant cultural landscapes. In the United States, the cultural landscape preservation movement has been led by the National Park Service (NPS), the agency which manages many of the nation's most important cultural landscapes, and administers most of the federal government's historic preservation programs.

The NPS Approach to Cultural Landscapes

As stated by Sauer, the definition of a cultural landscape is indeed very broad, in effect encompassing most of the world's land area,

² Carl Ortwin Sauer, "The Morphology of Landscape," in Land and Life: A Selection from the Writings of Carl Ortwin Sauer, ed. John Leighly (Berkeley, CA: University of California Press, 1963), 343; Sauer's essay originally was published in 1925.

Historic Cultural Landscapes: National Park Service Definitions

Cultural Landscape - a geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values.

Historic Designed Landscape - a landscape that was consciously designed or laid out by a landscape architect, master gardener, architect, or horticulturist according to design principles, or an amateur gardener working in a recognized style or tradition. The landscape may be associated with a significant person(s), trend, or event in landscape architecture; or illustrate an important development in the theory and practice of landscape architecture. Aesthetic values play a significant role in designed landscapes. Examples include parks, campuses, and estates.

Historic Vernacular Landscape - a landscape that evolved through use by the people whose activities or occupancy shaped that landscape. Through social or cultural attitudes of an individual, family or a community, the landscape reflects the physical, biological, and cultural character of those everyday lives. Function plays a significant role in vernacular landscapes. They can be a single property such as a farm or a collection of properties such as a district of historic farms along a river valley. Examples include rural villages, industrial complexes, and agricultural landscapes.

Historic Site - a landscape significant for its association with a historic event, activity, or person. Examples include battlefields and president's house properties.

Ethnographic Landscape - a landscape containing a variety of natural and cultural resources that associated people define as heritage resources. Examples are contemporary settlements, religious sacred sites and massive geological structures. Small plant communities, animals, subsistence and ceremonial grounds are often components.

Source: Charles A. Birnbaum, Preservation Briefs 36: Protecting Cultural Landscapes—Planning, Treatment and Management of Historic Landscapes (Washington, D.C.: U.S. Department of the Interior, National Park Service, 1994), pp. 1-2.

since very few present-day places, if any, have not been impacted in some way by human activities. However, the extent of human influence on landscapes varies appreciably through both space and time, and not all cultural landscapes can be considered historically important. In evaluating the historical significance of cultural landscapes, the NPS and most other public and private preservation authorities in the United States utilize the criteria of the National Register of Historic Places. In general, a historic landscape, or its principal component features, must be fifty years old or older. The landscape must possess historical integrity and significance through association with an important event, person, or design style or type of construction, or it must retain the potential to yield important information about the past.³ Historic landscapes, i.e., those that meet National Register criteria, thus represent only a small fraction of the broad spectrum of cultural landscapes considered by geographers.

- † Cultural landscape definitions are contained in Department of the Interior, National Park Service, NPS-28, Cultural Resource Management Guideline, Release No. 4, (Washington, D.C.: U.S. Department of the Interior, National Park Service, 1994).
- ³ Department of the Interior, National Park Service, National Register Bulletin 16A: How to Complete the National Register Registration Form (Washington, D.C.: U.S. Department of the Interior, National Park Service, 1991); For a more detailed discussion of the national register inventory and evaluation process, see Chapter Five of this report.

The National Park Service has defined four different types of historic landscapes: (1) historic designed landscapes; (2) historic vernacular landscapes; (3) historic sites; and (4) ethnographic landscapes (see above). Historic designed landscapes are deliberate, artistic creations reflecting recognized design styles. Historic vernacular landscapes, however, typically are unself-conscious creations that reflect the habits and lifeways of ordinary people. They express a cultural group's values and attitudes toward the land, and reflect patterns of settlement and land use over time. Historic sites are landscapes that are significant primarily for their associations with important events, activities, or persons, rather than their intrinsic form or design. Historic sites often function as museum settings for the interpretation of specific events or persons. In contrast, ethnographic landscapes are characterized by a continuity of use by ethnic groups for subsistence hunting and gathering, religious or sacred ceremonies, and other traditional activities.4 Although somewhat distinct, these four landscape types are not mutually exclusive-many cultural landscapes simultaneously represent two or more of these types.

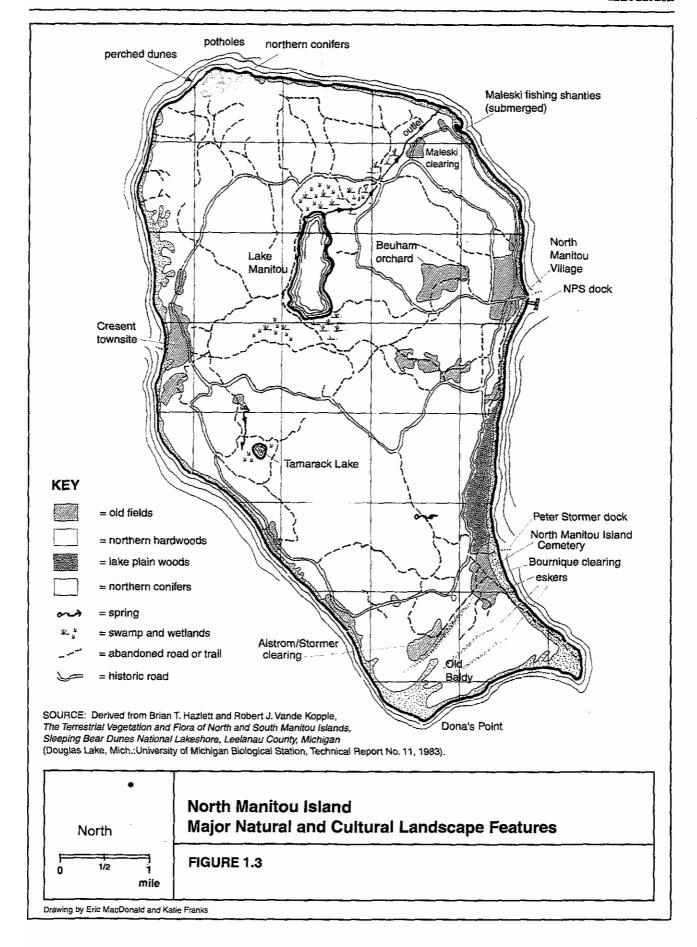
Interpretations of Cultural Landscapes on North Manitou Island

Although primarily vernacular in character, the cultural landscapes of North Manitou Island are remarkably diverse, and encompass multiple layers of cultural meaning and historical value (figure 1.3). Integrated among these various layers of history, and expressed indelibly in the land, is the story of agriculture. This report is the fourth in a series of studies of historic agriculture and agricultural landscapes prepared for the Sleeping Bear Dunes National Lakeshore and its region. The first, A Garden Apart (1992), provided an historical context for agriculture in the larger lakeshore region of Leelanau and Benzie counties. Two subsequent studies, Farming at the Water's Edge (1994) and 'Coming through with Rye' (1996), examined historic agricultural resources at Port Oneida on the mainland, and on South Manitou Island, respectively.⁵

This report, Tending a Comfortable Wilderness, is primarily an account of agricultural history and historic agricultural landscapes on North Manitou Island. Derived from a variety of documentary sources, the report also considers the ways in which agriculture historically was related to other human activities and landscapes on the island, and explores past interpretations of the island's natural and human history. The extent to which interpretive traditions shape popular attitudes, land management policies, and, ultimately, the cultural landscape, is seldom acknowledged. Nowhere is this tendency more apparent than in the story of North Manitou Island.

Portrayal of North Manitou Island's human history has been impelled by two popular myths. The first portrays the island is a place where "nothing happened"—or, stated less polemically, the island is represented as a place where human history is of little consequence or

- ⁴ Charles A. Birnbaum, Preservation Briefs 36: Protecting Cultural Landscapes— Planning, Treatment and Management of Historic Landscapes (Washington, D.C.: U.S. Department of the Interior, National Park Service, 1994), 1-2.
- ⁵ Susan Olson Haswell and Arnold R. Alanen, A Garden Apart: An Agricultural and Settlement History of Michigan's Skeeping Bear Dunes National Lakeshore Region (Omaha: Midwest Regional Office, National Park Service; Lansing: State Historic Preservation Office, Michigan Bureau of History, 1994); Marla J. McEnaney, William H. Tishler, and Arnold R. Alanen, Farming at the Water's Edge: An Assessment of Agricultural and Cultural Landscape Resources in the Proposed Port Oneida Rural Historic District at Sleeping Bear Dunes National Lakeshore, Michigan (Omaha: Midwest Regional Office, National Park Service, 1995); Brenda Wheeler Williams, Arnold R. Alanen, and William H. Tishler, 'Coming through with Rye': An Historic Agricultural Landscape Study of South Manitou Island at Sleeping Bear Dunes National Lakeshore, Michigan (Omaha: Midwest Field Area, National Park Service, 1996).
- ⁶ For a detailed description of the sources and research methodology utilized for this project, see Appendix A.



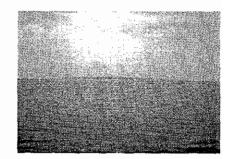
significance. The island essentially is conceived as a landscape without a history. Closely tied to this ahistorical view is a long-standing tradition of representing the landscape as an untouched "island wilderness." Although it is often acknowledged that past human activities did affect the landscape to some extent, the consequences of human habitation are often perceived to have been minimal and inconsequential—although something may have happened on the island, it was of little importance, and should not concern us today. Human history in such a landscape doesn't matter.

The second myth alleges that North Manitou Island's human history essentially mirrors that of its sister island, South Manitou. According to this supposition, the island's human history is mundane rather than unique, differing in only trivial ways from that of neighboring South Manitou Island. This report will argue that both of these interpretive traditions are delusive. Furthermore, this report will explore the consequences of these views for the island's cultural landscapes, National Park Service resource management philosophy and, ultimately, visitors' impressions of the island. In so doing, we hope this report will make a case for why history does indeed matter in places like North Manitou Island.

Beyond merely documenting North Manitou Island's historic agricultural landscapes, Tending a Comfortable Wilderness' aims to probe the ways in which past interpretations of the island's resources have informed NPS management strategies, particularly the proposed designation of all but 27 acres of the island as a potential wilderness unit. The North Manitou landscape encompasses impressive perched dunes, thousands of acres of dense, maple-beech deciduous forest, and endangered wildlife habitats, as well as a diverse array of vernacular buildings and cultural landscapes. Such physical features, in addition to the island's rich human history, have shaped management options for both cultural and natural resources. The role of history in the formulation of management decisions, however, has been largely unacknowledged, with unintended, if not unfortunate, consequences. Consciously acknowledging the island's environmental history, as this report strives to suggest, may illuminate the connections between natural and cultural systems, and articulate the importance of such connections to the study and management of historic architecture and landscapes. It is the making of such connections, this report suggests, that enriches visitors' experiences of landscapes like North Manitou Island. Tending a Comfortable Wilderness, then, is not just about the history of a small island in a large lake. It is that. But more importantly, it is about a way of looking at the world.

Chapter Two

An Overview of North Manitou Island's Settlement History



Viewed during mid-summer from the crest of a golden, northern Michigan dune, North Manitou Island appears as a thin, flat band of dark olive floating amidst the silvery blue waters of Lake Michigan, precariously grazing the boundary between water and sky. Moving closer, the distant verge becomes a bouyant landscape of ridges and valleys clothed in verdant greens, shadowy blues and purples, all lined with a tawny edge. Half a million years ago this land was frozen and hard, silent beneath a vast sheet of ice and rock several thousand feet thick. Each year snow fell on the continental glacier, increasing its height and further compressing the layers of ice below. Over many hundreds of years the edge of the ice sheet moved forward, and then retreated in response to climatic changes. During periods of relative warmth, some of which lasted several thousand years, the huge ice sheets vanished from the region, leaving the landscape awash in melt water. Plant and animal life returned to the land, reclaiming it until another plunge in global temperatures brought about the return of glacial ice.

Geologists refer to these cyclical "ice ages" as the Pleistocene Epoch, a chapter in geologic history that began approximately 500,000 to 2 million years ago. The most recent phase of the Pleistocene, termed the "Wisconsin stage," persisted in Michigan until about 10,000 to 12,000 years ago. During the Wisconsin stage, a vast glacial ice mass moved southward across the region, its front defined by an irregular edge of lobes, which flowed at a faster pace through pre-existing valleys and depressions. As the last great ice mass retreated, it left behind a highly irregular and variable terrain. In "conveyor-belt" fashion, piles of debris accumulated at the base

of the glacier during the extended periods when the front edge of the ice was stationary. The resulting ridges, called moraines, roughly outlined the front edge of the ice sheet during one stage of its final retreat. The retreat process, however, produced many other distinctive topological features: drumlins, streamlined hills molded by overriding ice, and eskers, kames, and ice-channel deposits, which are narrow, elongated deposits laid down by melt water flowing through channels or tunnels that were confined by ice. As the glacier melted, much of the surrounding landscape was inundated with water, creating expansive outwash plains in areas where water pooled or flowed for extended periods of time. Isolated blocks of ice formed earthen depressions called kettle holes, which later filled with melt water and became lakes, ponds, and bogs.¹

Much of the landscape of the Great Lakes region, including that of the Manitou islands and the Sleeping Bear Dunes area, was created by glaciers during the end of the Pleistocene Epoch. During their last retreat, glaciers filled ancient versions of the Great Lakes with melted icewater. Since that time, the water level of the Great Lakes has fluctuated considerably according to the position of the retreating ice front, the volume of meltwater during various periods, and the location of drainage ways or outlets. The present average water level of Lake Michigan is about 578 feet. During the postglacial period, which began in northern Michigan about 9,500 years ago, the highest lake level, 605 feet above sea level, occurred during the Lake Nipissing stage (5000 BP). This stage was preceded by the Lake Chippewa stage (9,500 to 4,500 years ago), when water levels were at their lowest, roughly 230 feet above sea level. During the low-water Lake Chippewa period the Manitou islands were joined with the mainland. Later, during the high-water Nippising stage, wave action sculpted the shoreline of the Great Lakes, particularly along the eastern and northern shore of Lake Michigan. The islands were entirely submerged during the Lake Nippising stage. The higher lake levels left behind areas of relict sandy lake bed and beach ridges.²

Like most of the Great Lakes region, the topography of the Sleeping Bear Dunes area bears the imprint of successive glacial epochs during the Pleistocene. It is a landscape of relatively low relief that is characterized by both active and ancient dunes, moraines and other glacial landforms, and small lakes and streams. North Manitou Island—one of the national lakeshore's most noteworthy features—is a glacial moraine and outwash plain. The topography of the eastern and central portions of the island consists of gently rolling hills and valleys. Steeper hills and sand bluffs are located in the northwestern and southern portions of the island. A long, serpentine esker extends across the south-central portion of the island, the topographical remnant of a river of meltwater and glacial debris that once flowed beneath the surface of a long-vanished glacier. Ancient beach ridges stretch along the island's eastern shoreline, shaped long ago during periods when lake water levels were higher. Two inland water bodies,

¹ John A. Dorr, Jr., and Donald F. Eschman, *Geology of Michigan* (Ann Arbor: University of Michigan Press, 1970), 140-163.

² Dorr and Eschman, Geology of Michigan, 164-179; Susan Olson Haswell and Arnold R. Alanen, A Garden Apart: An Agricultural and Settlement History of Michigan's Sleeping Bear Dunes National Lakeshore Region (Omaha: Midwest Regional Office, National Park Service; Lansing: State Historic Preservation Office, Michigan Bureau of History, 1994), 5-8; Brian T. Hazlett, "The Flora of Sleeping Bear Dunes National Lakeshore, Benzie and Leelanau Counties, Michigan," Michigan Botanist 30 (4):142 (1991).

Tamarack Lake and Lake Manitou, are depressions formed by huge blocks of glacial ice. The areas around these lakes constitutes the major wetland habitats of the island.

Reflecting the landscape's geologic history, North Manitou's soils generally are well-drained loamy sands, sandy loams, and sands (see below; figure 2.1). The soils on the island's lake terraces and beach ridges are moderately well- to well-drained. The southwestern and southeastern portions of the island shoreline are composed of active dunes, where stiff winds carve blowouts and cut narrow channels uphill into the vegetation. The dune shorelines have a surface layer of continually shifting sand; soils near the lakeshore do not retain water, fertility, or organic matter. Along the island's northwestern shore, tall perched dunes create an imposing, vertical facade of gravel and windblown sand.3 The glaciated landscape of the island provides settings for a broad range of plant and animal habitats, although sharp-edged environmental gradients generally are absent. The island's wetland habitats-Tamarack Lake and Lake Manitou, as well as a few scattered natural springs where small areas of poorly-drained muck soils are found-support several plant species found nowhere else on the Manitou islands.4

Postglacial Environment and Prehistoric Human Habitation

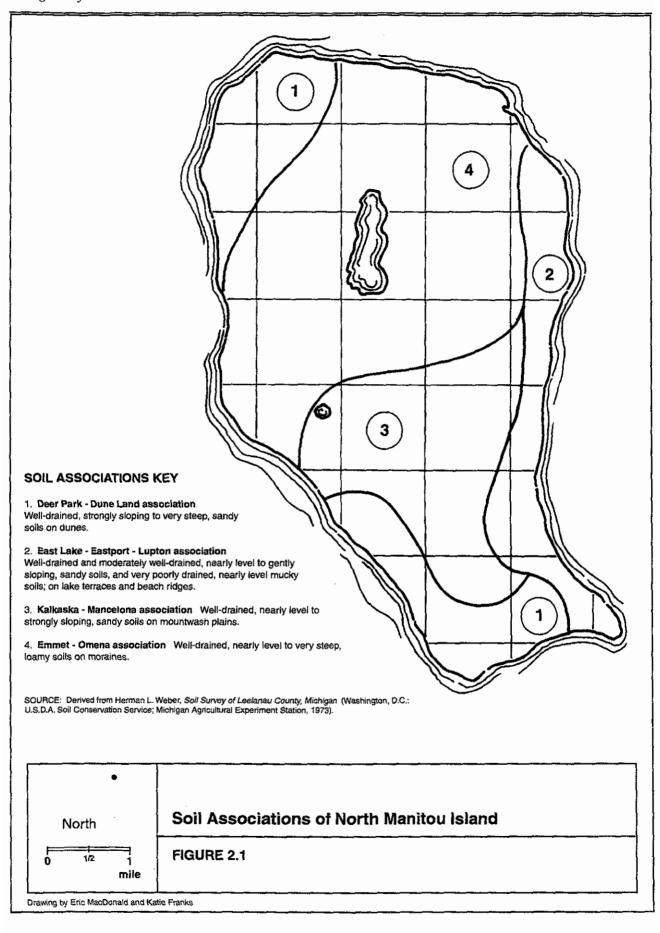
Following the retreat of the last glacial ice front, a diverse matrix of plant and animal habitats covered the land surface, evolving in re-

- ³ Herman L. Weber, Soil Survey, 2-5; Brian T. Hazlett and Robert J. Vande Kopple, The Terrestrial Vegetation and Flora of North and South Manitou Islands, Sleeping Bear Dunes National Lakeshore, Leelanau County, Michigan (Douglas Lake, Mich.: University of Michigan Biological Station, 1983), 29-30. For a detailed discussion of the geological history and the current climatic context of the Sleeping Bear Dunes region, see Haswell and Alanen, Garden Apart, 5-17.
- ⁴ Herman L. Weber, Soil Survey of Leelanau County, Michigan (Washington, D. C.: U.S.D.A. Soil Conservation Service, in cooperation with the Michigan Agricultural Experiment Station, 1973); Hazlett and Vande Kopple, Terrestrial Vegetation, 30, 41, 54-58.

Soil Associations of North Manitou Island

Soil scientists have grouped the soils of North Manitou Island into four soil associations. The Deer Park-Dune Land Association occurs on active dunes along Lake Michigan. It has a surface layer of continually shifting sand, and may include scattered patches of loamy sand, sandy loam and finer textured till. Having low or very low available water capacity, fertility, and organic matter content, none of these soils is suited to farming. The East Lake - Eastport - Lupton Association, found on lake terraces and beach ridges adjacent to lakes, is moderately well to well-drained. Eastlake has a surface layer of a very dark grayish-brown loamy sand and a loamy sand subsoil. Eastport consists of black sand over grayish brown sand and a subsoil of sand. Lupton is a nearly level organic soil, poorly drained. It is found in low areas. Orchards are well-suited to the well-drained soils of this association. Cultivated and forage crops are moderately well-suited to the well-drained soils. The Emmet - Leelanau Association is hilly and divided by many deep, narrow valleys. Emmet is dark grayish-brown sandy loam over sandy loam, loamy sand, sandy clay loam. Leelanau is dark gray or brown loamy sand over loamy sand. Cherries, apples, peaches and plums are well-suited to these soils. Pasture and other crops grow moderately well. The fourth association. Kalkaska - Mancelona has moderate to severe limitations for crops and orchards. Fertility and available water capacity are low. The soils are sand or sandy loam over loamy sand over gravelly sandy loam.

Source: Herman L. Weber, Soil Survey of Leelanau County, Michigan (Washington, D. C.: U.S.D.A. Soil Conservation Service, in cooperation with the Michigan Agricultural Experiment Station, 1973).



sponse to changes in climate, hydrology, and animal-plant interactions. Immediately after the retreat of glacial ice, approximately 12,000 years ago, the landscape of the upper Great Lakes region occupied an ecological transition zone, or "ecotone," between tundra ecosystems that bordered the ice front, and boreal forests which predominated to the south. For several hundred years a patchy mosaic of tundra and boreal woodland ecosystems provided favorable environments for many species of large herbivores that preferred open, well-drained habitats. These included mammoth, mastodon, barren-ground caribou, and musk ox. As the region's climate gradually warmed, tundra vegetation gave way to very dense boreal forests.⁵

Archaeologists and anthropologists have partitioned the prehistory of the Great Lakes region into four broad "periods" of cultural evolution, each of which denotes a distinctive matrix of technological, subsistence, lifeway strategies. Each period or phase generally corresponds with a discrete span of time (see p. 6). Such chronologies tend to obscure the fact that differences among various periods are merely conceptual, that cultural change may occur gradually or radically, and that certain characteristics of one period may coexist simultaneously and/or propinquitously with characteristics that are typical of preceding or subsequent phases. Nonetheless, as a heuristic device, such chronologies are a useful way of dividing the continuum of human cultural development into comprehensible aspects.

The earliest archaeological evidence of prehistoric human habitation in the Sleeping Bear Dunes region is believed to date from the Late Archaic period, 3000 BC to 600 BC.6 It is likely, however, that prehistoric peoples hunted in the region much earlier. Prehistoric humans may have entered the New World as early as 30,000 years ago, although mass migrations of humans probably did not occur until 16,000 years later. Paleo-Indian cultures (12000 BC - 9000 BC) probably did not enter the Great lakes region until 10000 BC. Along the edges of the retreating glaciers, Paleo-Indian peoples encountered a resource-rich tundra environment—an ecosystem that was more biologically diverse than modern tundra ecosystems. Retreating glaciers left behind habitats that apparently were favored by large grazing herbivores, such as mammoths, mastodons, bison, musk-ox, and caribou, and the groups of humans who hunted them. The hunting economy of Paleo-Indian peoples was supported by an abundance of large game species. Barren ground caribou may have been particularly important.7

By 8000 BC, much of the tundra and open boreal forest mosaic of the upper Great Lakes region had been replaced by large expanses of very dense spruce-fir boreal forests. The disappearance of open habitats within the region probably contributed to the decline and eventual extinction of large grazing herbivores. Anthropologists speculate that diminishing populations of large herbivores, brought

S James E. Fitting, The Archaeology of Michigan: A Guide to the Prehistory of the Great Lakes Region, 2nd rev. ed. (Bloomfield Hills, Mich.: Cranbrook Institute of Science, 1975), 35-36; William A. Lovis, Robert Mainfort, and Vergil E. Noble, "An Archaeological Inventory and Evaluation of the Sleeping Bear Dunes National Lakeshore, Leelanau and Benzie Counties, Michigan" (Lincoln, Nebr.: National Park Service, 1976), 28; Charles Edward Cleland, "The Prehistoric Animal Ecology and Ethnozoology of the Upper Great Lakes Region," Anthropological Papers 29 (Museum of Anthropology, University of Michigan, Ann Arbor, 1966), 91.

⁶ Haswell and Alanen, Garden Apart, 19.

⁷ Fitting, Archeology of Michigan, 36; Lovis, Mainfort, and Noble, "Archaeological Inventory and Evaluation," 28; Charles E. Cleland, Rites of Conquest: The History and Culture of Michigan's Native Americans (Ann Arbor: University of Michigan Press, 1992), 13-14.

Periods of Prehistoric Cultural Development in Michigan

Archaeologists and anthropologists have divided the continuum of prehistoric cultural development into four broad phases. Each phase is marked by differences in the types, materials, form, decoration, spatial distribution, and stratum of artifacts, which suggest that the technological, social, and ideological elements of each period are more or less distinct. Although many diverse cultural groups certainly existed within each phase, all shared certain common technologies, subsistence patterns, and environmental adaptations.

Paleo-Indian 11000+ BC to 8000 BC

Archaic 8000 BC - 600 BC

Early Archaic 8000 BC to 6000 BC

Middle Archaic 6000 BC to 3000 BC

Late Archaic 3000 BC to 1000/600 BC

Woodland 1000/600 BC - AD 1620

Early Woodland 600 BC to 300 BC

Middle Woodland 300 BC to AD 500/600

Late Woodland AD 500/600 to AD 1620

Historic Contact AD 1620 to AD 1830

Sources: James E. Filting, The Archaeology of Michigan: A Guide to the Prehistory of the Great Lakes Region, 2nd rev. ed. (Bloomfield Hills, Mich.: Cranbrook Institute of Science, 1975); Ronald J. Mason, Great Lakes Archaeology (New York: Academic Press, 1981); Charles E. Cleland, Rites of Conquest: The History and Culture of Michigan's Native Americans (Ann Arbor: University of Michigan Press, 1992), 13.

about by a warmer climate and changing floral resources, gradually rendered the specialized hunting strategy of Paleo-Indian peoples less effective. As mixed deciduous and coniferous forests increased their range within the region, human populations responded by adopting a formalized pattern of seasonal activities and increasingly utilized plants as sources of food. These two important changes mark the beginning of the Archaic period ((8000 BC - 1000 BC), which archaeologist Charles Cleland has described as "a long and poorly known cultural sequence that is perhaps best understood as a reflection of changes in lifeway necessary to accommodate emerging modern landscape and climate."

Although material evidence is scant in the upper Great Lakes region, it appears as though the economy of Early Archaic cultures (8000 BC - 6000 BC) focused on forest game, such as woodland caribou, moose, hare, and beaver. Fishing may have been practiced during summer months, but hunting remained the primary subsistence activity, augmented somewhat by wild plant foods. Such a strategy probably sustained relatively small numbers of people, especially in the northern portions of the region where dense coniferous forests supported fewer game species.⁹

⁸ Cleland, Rites of Conquest, 15; Cleland, "Prehistoric Animal Ecology," 92.

⁹ Lovis, Mainfort, and Noble, "Archaeological Inventory and Evaluation," 28; Cleland, "Prehistoric Animal Ecology," 92.

By 6000 BC, much of the region's boreal forest vegetation had given way to a mixture of deciduous and coniferous forests. Approximately 7,000 years ago, during a period of several hundred years called the "antithermal climatic episode" (6000 BC - 3000 BC), the climate of the Great Lakes region was somewhat warmer and drier than it is today. Deciduous forests spanned across nearly all of the region, except for the most northern areas, where dense coniferous forests remained. The populations of contemporary woodland animal species, such as whitetail deer, increased as deciduous forest habitats expanded. Deciduous forests reached their northernmost limit during the peak of the Antithermal episode. 10

Middle Archaic cultures (6000 - 3000 BC) inhabited the area during the antithermal climatic episode, when deciduous forests displaced coniferous forests in all but the northernmost portions of the region. The appearance of ground stone technology during this period marks the first evidence of "divergent adaptive patterns within the region."11 Stone tools such as mortars, pestles, and axes were used by Archaic peoples to process seeds, wood, and other plant fibers. The emergence of this technology is considered to be an indication of increasing reliance on plant resources, especially among southern Middle Archaic cultures. In the north, Middle Archaic cultures adopted a more diffuse economy based on hunting both small and large game, and greater utilization of plant resources. The most important game animal during this time probably was whitetailed deer. 12 Material evidence of Early and Middle Archaic people is scant in northern Michigan, presumably because extreme fluctuations in the water levels of the Lake Chippewa stage (approximately 9,500 to 4,500 years ago) either eroded or buried shoreline habitation sites.13

Following the height of the antithermal climatic episode, the climate of the region cooled slightly, and by 3000 BC the distribution of vegetation had evolved toward a mixture of deciduous and coniferous forests—a pattern similar to that which characterizes the area today.¹⁴ During the Late Archaic period (3000 BC - 1000 BC), which roughly coincides with the end of the antithermal climatic episode, significant differences persisted between the environmental and biotic characteristics of the northern and southern portions of the region. In the north, where dense, northern conifer-dominated forests were prevalent, smaller groups of people followed a subsistence strategy focused more heavily on hunting and fishing. In the deciduous forests of the south, a larger human population was supported by a diffuse economy based on winter deer hunting, spring and summer fishing, and the collection of wild plant foods. 15 The subsistence strategies of Late Archaic peoples further evolved into an economy based on extensive trade networks that ranged from the Gulf of Mexico to Lake Superior.

During the Late Archaic period the climate and vegetation of the Sleeping Bear Dunes region appears to have been favorable for human habitation. In addition to hunting and fishing, the

¹⁰ Cleland, "Prehistoric Animal Ecology," 92-93.

¹¹ Ibid.

¹² Cleland, "Prehistoric Animal Ecology," 92-93; Lovis, Mainfort, and Noble, "Archaeological Inventory and Evaluation," 28; Cleland, Rites of Conquest, 17.

¹³ Gilbert/Commonwealth Inc. of Michigan, "Cultural Resource Assessment of Proposed Rehabilitation of the Platte River Campground and Limited Testing at Site 20BZ16, Benzie County, Michigan" (National Park Service, 1986), 21.

¹⁴ Cleland, "Prehistoric Animal Ecology," 92-93; Cleland, Rites of Conquest, 15.

¹⁵ Cleland, "Prehistoric Animal Ecology," 93; Lovis, Mainfort, and Noble, "Archaeological Inventory and Evaluation of the Sleeping Bear Dunes National Lakeshore," 29. Although the climate of the Great Lakes region progressively cooled during the Late Archaic period, it remained somewhat warmer than it is now.

lakeshore's Late Archaic inhabitants probably gathered wood for fuel and tools, plant fibers for cordage, and nuts, berries, and seeds for food. The Dunn Farm Site, a Late Archaic burial discovered in 1973 near Glen Lake, contained several charred grains of wild rice (Zizania acquatica), suggesting that the human groups that inhabited the Sleeping Bear Dunes region during this time may have sought out this economically important plant. Wild plant foods recovered from a Late Archaic site in Saginaw County, Michigan, include acorn, walnut, butternut, hickory nut, and grape seed. Although other plant foods such as tubers, tree sap, fruits with small or delicate seeds, and greens, most likely were utilized by Late Archaic people, they are seldom recovered archaeologically. 17

Archaeological evidence recovered thus far within the Sleeping Bear Dunes area suggests that human utilization of the region's resources during the Late Archaic period was followed by an "apparent occupational hiatus." It is unclear whether the paucity of archaeological evidence indicates a general decline in the region's human population or the persistence of Late Archaic technologies during a time when Early and Middle Woodland cultures predominated throughout other, more southerly, portions of the upper Great Lakes. 18 The emergence of Woodland cultures is generally marked by two important changes: ceramics manufacture, and plant domestication. 19 These technological developments eventually became "the foundation of an agricultural lifeway."20 Toward the close of the Early Woodland period (1000/600 BC - 300 BC), Michigan's human populations increasingly became active in the "Hopewell Interaction Sphere"—an extensive network based on both economic and cultural interactions. In southern Michigan, physical manifestations of the Hopewell culture included the construction of burial mounds and the production of ceremonial pottery. During the same time, several other cultural complexes existed in Michigan, including one designated by James E. Fitting as "Lake Forest Middle Woodland," which flourished in the forested, northern areas of the lower peninsula.²¹

The trend of increasing reliance on plant foods continued during the Early Woodland period, reinforced by the introduction of domesticated plant species in areas south of the Great Lakes. By the Middle Woodland period (300 BC - AD 500/600), two distinct subsistence patterns predominated in Michigan. Southern populations continued a diffuse subsistence pattern based on a combination of hunting, fishing, and collecting wild plant foods. This strategy was supplemented by the adoption of domestic species of sunflowers and squash, which provided a food source that was more reliable than wild plants. The collection of plant seeds, both wild and domestic, gradually became the most important subsistence activity for southern populations. It is speculated that the development of focal agricultural economies in areas south of the Upper Great Lakes contributed to the decline of the vast "Hopewellian" trade networks, as the need for social control over geographically scattered resources decreased.²²

¹⁶ Haswell and Alanen, Garden Apart, 19.

¹⁷ Richard Asa Yarnell, "Aboriginal Relationships between Culture and Plant Life in the Upper Great Lakes Region," *Anthropological Papers* 23 (Museum of Anthropology, University of Michigan, Ann Arbor, 1964), 142.

¹⁸ Lovis, Mainfort, and Noble, "Archaeological Inventory and Evaluation," 93.

¹⁹ Lovis, Mainfort, and Noble, "Archaeological Inventory and Evaluation," 29; Gilbert/Commonwealth, "Cultural Resource Assessment of Proposed Rehabilitation of the Platte River Campground," 22.

²⁰ Cleland, Rites of Conquest, 19.

²¹ Lovis, Mainfort, and Noble, "Archaeological Inventory and Evaluation of the Sleeping Bear Dunes National Lakeshore," 29-30; Fitting, Archaeology of Michigan, 98.

²² Cleland, "Prehistoric Animal Ecology," 93-95.

In northern Michigan, where climatic conditions effectively precluded reliance on domestic plant foods, the predominant subsistence strategy remained more focused on hunting and fishing. The development of larger lakeside villages in northern regions during the Woodland period suggests an increasing reliance on spring and summer fishing, a trend that perhaps was spurred by the invention of effective fishing nets. During the winter, northern populations focused on hunting woodland caribou, moose, bear, beaver, and hare.²³ The range of wild plant foods utilized by northern populations during the Early and Middle Woodland periods probably was not significantly larger than that of the Archaic period. Important plants likely included Canada plum, hickory, walnut, and butternut.²⁴

During the Woodland period, the region that now contains Sleeping Bear Dunes National Lakeshore remained within a major "transition zone" between northern and southern "biotic provinces." The area thus contained floral and faunal elements typically associated with larger communities located either to the south or the north. The distribution of plant and animals species probably resembled the patterns that characterizes the region today. The northern, or "Canadian," biotic province, is dominated by northern coniferous forests. The "Carolinian" province is characterized by deciduous forests, and extends from the Great Lakes toward the south and east. The boundary between these biotic provinces is somewhat indistinct, consisting of a transition zone that contains floral and faunal elements of both the Canadian and Carolinian provinces (figure 2.2). Sixteen northern plant species currently reach their southernmost limit near the national lakeshore, while 17 southern plant species approach the north-

²³ Lovis, Mainfort, and Noble, "Archaeological Inventory and Evaluation of the Sleeping Bear Dunes National Lakeshore," 29; Cleland, "Prehistoric Animal Ecology," 94-95.

²⁴ Richard Asa Yarnell, "Aboriginal Relationships between Culture and Plant Life," 142-143.

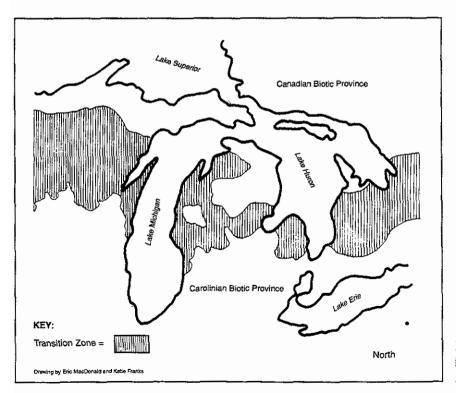
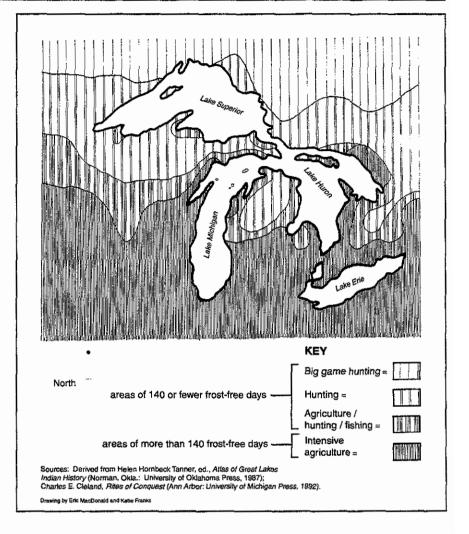


Figure 2.2. Position of the Transition Zone between the Canadian and Carolinian Biotic Provinces in the Upper Midwest.

Figure 2.3. American Indian Subsistence Strategies, Late Woodland and Early Historic Contact periods.

- ²⁵ Jeffrey J. Richner, "Archeological Excavations at the Platte River Campground Site (20BZ16), Sleeping Bear Dunes National Lakeshore, 1987" (Lincoln, Nebr.: Midwest Archeological Center, National Park Service, 1991), 9.
- ²⁶ Lovis, Mainfort, and Noble, "Archaeological Inventory and Evaluation," 92.
- ²⁷ Lovis, Mainfort, and Noble, "Archaeological Inventory and Evaluation,"
 96; Cleland, "Prehistoric Animal Ecology,"
 95.
- 28 Lovis, Mainfort, and Noble, "Archaeological Inventory and Evaluation of the Sleeping Bear Dunes National Lakeshore," 92; Gilbert/Commonwealth, "Cultural Resource Assessment of Proposed Rehabilitation of the Platte River Campground," 21; Haswell and Alanen, Garden Apart, 20; Yarnell concluded that the average number of consecutive frost-free days was the most important limiting factor for prehistoric agriculture. He estimated that the successful cultivation of corn and other cultigens in the Midwest required a minimum average growing season of 120 days. See Yarnell, "Aboriginal Relationships between Culture and Plant Life," 126-137.



ernmost limits of their ranges. The precise extent and geographic position of this zone is somewhat variable, depending on nonbiotic environmental factors and climate fluctuations.²⁵

Archaeological evidence dating from the Late Woodland period (AD 500/600 - 1620) indicates that settlements in the Sleeping Bear Dunes vicinity were "low-density occupations," and that the area was "occupied and exploited on an infrequent basis by small groups."26 These groups probably resided more generally in northwestern lower Michigan, where they congregated into larger lakeside camps for fishing during the warm-season months. During winter, the camps dispersed into smaller, family-based hunting parties.²⁷ Although the lake-moderated climate of the Sleeping Bear Dunes region was well within the effective limit for successful cultivation of corn and other domesticated plant species, archaeological data suggest that prehistoric peoples did not cultivate crops within the specific national lakeshore boundaries.28 Whereas wild plant foods and, increasingly, domesticated plants became important staples for southern populations during the Woodland period, the prehistoric inhabitants of the national lakeshore region evidently maintained a more diffuse economy that was focused on seasonal hunting and fishing, augmented by the collection of wild plants—a strategy typical of northern, or Canadian province, populations in the upper Great Lakes (figure 2.3).²⁹

The Sleeping Bear Dunes landscape possessed numerous floral and faunal elements that most likely were exploited by Late Woodland populations. Both the number and diversity of potentially useful resources were enhanced by the region's position within a biotic transition zone. The ranges of many economically valuable game animals, including black bear, raccoon, woodchuck, chipmunk, squirrel, beaver, muskrat, porcupine, hare, and whitetailed deer, extended into the lakeshore region. The area's Lake Michigan shoreline, and various inlets, inland lakes, and streams, made it a valuable fishing ground for sturgeon, pike, pickerel, lake trout, muskellunge, bass, bullhead, sucker, and other desirable food species. Furthermore, the lakeshore's position along a segment of the Mississippi flyway probably enhanced its value as a hunting ground for game birds, as did the region's extensive maple-beech forests—the preferred feeding ground for migrating flocks of passenger pigeons.³⁰ The lakeshore region also contained abundant floral resources, which likely were exploited by Woodland and early Historic period populations. All three of the most economically important tree species—sugar maple (Acer saccharum), paper birch (Betula papyrifera), and white cedar (Thuja occidentalis)—are native to the region, as are the two most important food plants: sugar maple, and wild rice. Other economically valuable plant species found within the lakeshore include basswood (Tilia americana), American beech (Fagus grandifolia), blueberries (Vaccinium spp.), blackberries and raspberries (Rubus spp.), chenopods (Chenopodium spp.), and duck potato (Sagittaria latifolia).31

Prehistoric Habitation on North Manitou Island

The general pattern of non-intensive, seasonal use, which seems to apply to the national lakeshore in general, also is consistent with the prehistoric material evidence collected from North Manitou Island. Archaeological sites indicate that North Manitou Island was occupied by aboriginal peoples by 1000 BC, and again between AD 1000 and the time of European contact (ca. 1630-1650). The clustering of known archaeological sites on the island suggests that prehistoric occupation was concentrated along the eastern shore of the island.³² One of the sites, 20LU38, was relatively substantial in size, suggesting that it may have been occupied by a large group, or that it may represent several, successive occupations by smaller groups over a longer time period.³³ The sites indicate that the resources of North Manitou Island may have been utilized more intensively than otherwise would be expected of island habitats in general. The reason for this is unclear, as it is likely that island habitats contained few, if any, floral or faunal elements that would have been less abundant or unavailable on the mainland.

Faunal resources that Late Archaic and Woodland peoples may have sought on North Manitou Island include small mammals such as squirrel, hare, and perhaps beaver and muskrat. Other

- ²⁹ Lovis, Mainfort, and Noble, "Archaeological Inventory and Evaluation," 91-92, 96; Gilbert/Commonwealth Inc. of Michigan, "Cultural Resource Assessment of Proposed Construction Activities South Manitou Island, Sleeping Bear Dunes National Lakeshore, Michigan," (National Park Service, 1985), 6: Cleland, "Prehistoric Animal Ecology," 95.
- ³⁰ Richner, "Archeological Excavations at the Platte River Campground Site," 9.
- ³¹ Yarnell, "Aboriginal Relationships between Culture and Plant Life," 141-145.
- ³² Charles E. Cleland, "A Preliminary Report on the Prehistoric Resources of North Manitou Island" (Detroit: William R. Angell Foundation. 1967), 11.
- ³³ Lovis, Mainfort, and Noble, "Archaeological Inventory and Evaluation," 91.

³⁴ Cleland states that the canoe was "probably of Indian manufacture," but adds that it could have been produced by "early European settlers or lumbermen" (Charles E. Cleland, "A Preliminary Report on the Prehistoric Resources of North Manitou Island", 10-11).

35 If the sites on North Manitou Island represent hunting and fishing occupations, then the populations of these camps likely would have been exclusively male. The labor associated with tending agricultural crops, gathering wild plant materials, and processing and storing these commodities was largely within the economic realm relegated to women. See James A. Clifton, George L. Cornell, and James M. McClurken, People of the Three Fires: The Ottawa, Potawatomi and Ojibway of Michigan (Grand Rapids: Grand Rapids Inter-tribal Council, 1986), 2: Cleland, Rites of Conquest, 186-192.

³⁶ Appendix B also includes a brief assessment of human/environment interactions during recent prehistoric times.

³⁷ Yarnell, "Aboriginal Relationships between Culture and Plant Life," 14; Cleland, Rites of Conquest, 25.

38 Haswell and Alanen, Garden Apart, 20.

³⁹ Yarnell, "Aboriginal Relationships between Culture and Plant Life," 14.

40 The recognition of Ojibwa, Ottawa, and Potawatomi as culturally distinct groups is largely an historical artifact imposed by Europeans and Euro-Americans. All three "tribes" speak similar dialects of the Algonquian language and share similar mythologies and cultural beliefs. Differences among various Anishnabeg groups may have been heightened, or perhaps made manifest, through interactions with Europeans. Despite such cultural differentiation, however, the Anishnabeg remained unified during the early Historic Contact period through traditional kinship and trade relationships, and were loosely organized politically as the "Three Fires Confederacy." See Clifton et al., People of the Three Fires, v; Cleland, Rites of Conquest, 40-41; James M. McClurken, Gah-Baeh-

animals, such as black bear, whitetailed deer, and moose, probably were hunted on the mainland, but most likely were not available on the island. None of these larger animal species inhabited the island at the time of Euro-American settlement (ca. 1830). In addition to small mammals, passenger pigeons and various water birds and their eggs may have been available on the island during short seasonal intervals. Aboriginal peoples may have used sheltered shoreline sites on the island as fishing camps. A severely deteriorated dugout canoe recovered in 1966 from Lake Manitou suggests that the island's inland lake may have been utilized as a source for fish, turtles, or frogs.34 Archaeological evidence collected from the mainland indicates that the Late Archaic and Late Woodland inhabitants of the lakeshore region also collected and utilized wild plants, although it is not clear whether such activity also occurred on the islands.35 Appendix B lists the present-day floral elements of North Manitou Island that may have been utilized by aboriginal populations.³⁶

Life after the Arrival of the Wemitigoji

Near the end of the Late Woodland period several distinct cultures existed in the upper Great Lakes region. These included the Lake Winnebago culture in eastern Wisconsin, the Fisher culture situated at the southern end of Lake Michigan, the Blue Island culture near present-day Chicago, the Peninsular Woodland culture at the northern end of Lake Michigan, the Lalonde culture around Georgian Bay, and the Owasco culture of southeastern Michigan and southwestern Ontario. The Late Woodland populations of Michigan and the portion of Ontario north of the Great Lakes appear to be the predecessors of the Algonquian-speaking peoples who inhabited the region at the time of contact with Europeans (ca. 1640)—the Ojibwa, Ottawa, Potawatomi, and Miami.³⁷ The Late Woodland inhabitants of the Sleeping Bear Dunes region appear to have had cultural affiliations with populations situated to the south in present-day Oceana and Mason counties, in Wisconsin's Door Peninsula, and to the north, near Mackinac.38

During the early Historic Contact period, the American Indian groups situated around the upper Great Lakes included members of the Iroquoian, Siouan, and Algonkian linguistic families. The Algonkian groups included the Ottawa, Ojibwa, Menomini, Potawatomi, Mascouten, Miami, Sauk-Fox, and perhaps Kickapoo, many of whom were located around the western Great Lakes. The area from southern Michigan and the Upper Peninsula through Ontario north of the Great Lakes was inhabited by the Anishnabeg—peoples that today we identify separately as the Ojibwa, Ottawa, and Potawatomi. The Anishnabeg culture originated at the North Atlantic coast in the vicinity of present-day Newfoundland. Over a period of several centuries beginning, perhaps, around A.D. 1000, the Anishnabeg migrated westward, becoming firmly established in the central Great Lakes region by at least A.D. 1500. The Anishnabeg

followed a semi-sedentary settlement pattern. In the south, subsistence trategies centered on agricultural crops, whereas hunting and fishing predominated in the north, where growing seasons were too brief for cultivation of corn, beans, and squash.⁴²

Following contact with Europeans during the early 1600s, the economies and lifeways of the American Indian groups that inhabited the upper Great Lakes were radically transformed. The French, whom the Anishnabeg called Wemitigoji, initially established a strong military and trade alliance with the Huron Indians, who occupied territory near Montreal, the economic capital of New France. The Ottawa were the first Anishnabeg people to establish direct trade relations with Europeans. A French expedition may have encountered Ottawa Indians near Montreal as early as 1615.⁴³

By the 1640s intensive fur trapping had seriously depleted the population of beaver in eastern North American, prompting the Iroquoian tribes, who were allied with the British, and who occupied much of these eastern territories, to invade lands further to the west. To escape the ever-more-frequent Iroquois raids, the Ottawa, who then were living in southern Ontario, relocated to northern Michigan and Wisconsin. At the same time, a series of disease epidemics and warfare with the Iroquois nearly destroyed the Huron, who until then had remained the principal trading partners of the French.⁴⁴ The Ottawa subsequently became the primary trading partners of the French, serving as "middlemen" between the French and the Anishnabeg people to the north and west.⁴⁵

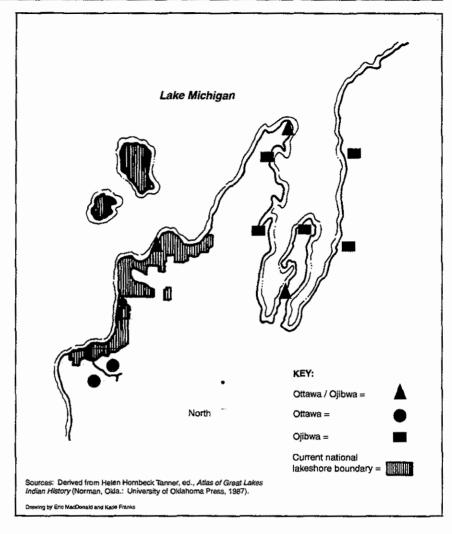
As a result of almost continuous incursions by Iroquois war parties, the lower peninsula of Michigan was largely depopulated. Ottawa settlements were concentrated near the northern tip of the lower peninsula, along the northern shore of Lake Michigan, to the Keewenaw peninsula and the Lake Superior shoreline to Chequamegon, near Bayfield, Wisconsin—territory that they shared with bands of Ojibwa. By the early 1670s the military strength of the Iroquois had greatly waned. The Ottawa re-established their head-quarters at present-day St. Ignace, Michigan. By the early 1700s the Ottawa had established large villages in northern lower Michigan, particularly along the lakeshore where longer growing seasons permitted corn cultivation. 46

In 1742, the Ottawa moved their main village from St. Ignace to Wawgawnawkezee (also known as Good Hart, or Middle Village), near present-day Harbor Springs. The French name for the location, L'Arbre Croche (crooked tree), eventually was attached by Euro-Americans to the entire coastal region from Mackinac to the southern shore of Little Traverse Bay.⁴⁷ The Ottawa eventually established villages throughout the western half of the lower peninsula southward to the Grand River Valley. Agricultural crops, which were grown near these scattered, semi-permanent camps, were supplemented with wild game, fish, and wild plant foods,

Jhagwah-Buk (The Way It Happened): A Visual Culture History of the Little Traverse Bay Bands of Odawa (East Lansing: Michigan State University Museum, 1991), 3.

- ⁴¹ Cleland, Rites of Conquest, 8-10; McClurken, Gah-Baeh-Jhagwah-Buk, 3. According to Cornell, some scholars speculate that the westward migration of the Anishnabeg may have been spurred by devastation from diseases introduced to eastern North America by Norse settlers around A.D. 1000. See George L. Cornell, "Ojibway," in Clifton, et al., People of the Three Fires, 76-77.
- 42 Cleland, Rites of Conquest, 45-49.
- 43 McClurken, Gah-Baeh-Jhagwah-Buk, 3.
- ⁴⁴ James M. McClurken, "Ottawa," in Clifton, et al., *People of the Three Fires*, 13; McClurken, *Gah-Baeh-Jhagwah-Buk*, 3.
- 45 McClurken, Gah-Baeh-Jhagwah-Buk, 3; McClurken, "Ottawa," 12; The name "Ota'wa," or "Odawa," is traditionally thought to derive from the Anishnabeg term meaning "to trade" or "trader." See McClurken, "Ottawa," 11; Cleland, Rites of Conquest, 86. Basil Johnston disputes this interpretation, however, proposing instead that the name more likely "came from ottauwuhnshk, a river reed that this branch of the Ashnaubaek used as matting, bedding, and partitions." See Basil Johnston, The Manitous: The Spiritual World of the Ojibway (New York: Harper Collins, 1995), 245.
- ⁴⁶ McClurken, Gah-Baeh-Jhagwah-Buk, 3; McClurken, "Ottawa," 13; Cleland, Rites of Conquest, 147; Haswell and Alanen, Garden Apart, 21-23.
- ⁴⁷ McClurken, Gah-Baeh-Jhagwah-Buk, 4; Haswell and Alanen, Garden Apart, 22-23.

Figure 2.4. American Indian Settlements, Leelanau Peninsula Vicinity, ca. 1830.



48 McClurken, Gah-Baeh-Jhagwah-Buk, 3-5; Cleland, Rites of Conquest, 186-192. In addition to the traditional crops of com, beans, and squash, the American Indians of the L'Arbre Croche district also reportedly cultivated apple trees, which probably were introduced to them by French missionaries or traders. See M. L. Leach, A History of the Grand Traverse Region (Traverse City: Traverse City Herald, 1883), 7; Helen Hornbeck Tanner, Atlas of Great lakes Indian History, 5. Utilization of sugar maple and wild rice may have increased following contact with Europeans, due to the availability of copper kettles for boiling maple sap and parching wild rice. See Yarnell, "Aboriginal Relationships between Culture and Plant Life," 78, 144-145.

49 Cleland, Rites of Conquest, 193.

⁵⁰ Cleland, Rites of Conquest, 178-180, 186-192; McClurken, Gah-Baeh-Jhagwah-Buk, 3. particularly maple syrup. During winter months the villages dispersed into smaller groups which migrated to southern hunting grounds.⁴⁸

By the early 1800s, the Ottawa of the Grand Traverse Region were joined by bands of Ojibwa Indians. The Leelanau peninsula, at this time, was a "transition area" between these two closely-related groups. ⁴⁹ The Ojibwa coexisted with the Ottawa, establishing villages of their own, forming combined Ottawa and Ojibwa settlements, and strengthening kinship ties through intermarriage. These Leelanau peninsula communities almost certainly were involved in the fur trade, which peaked in the Great Lakes region shortly after the War of 1812 (ca. 1812-1820). Important trade goods during this time included not only beaver, otter, and marten pelts, but also locally-grown corn, squash, beans, sunflowers and wild plant foods, dried meat and fish, maple sugar, woven bags, mats, pitch and bark, and articles of clothing. ⁵⁰

By 1830 there were at least seven American Indian villages in present-day Leelanau and Benzie counties (figure 2.4). In the vicinity of the present-day Sleeping Bear Dunes National Lakeshore, these included an Ottawa settlement near Platte Lake, and combined Ottawa and Ojibwa villages near the mouth of the Crystal River, near present-day Leland, and near Cathead Point.⁵¹ As in the past, no major settlements were located on either South or North Manitou islands. Both islands, however, probably were utilized occasionally for hunting and fishing. In 1823, Albert G. Ellis (1800-1885) remarked that the "Big Manitou" island appeared "to have been a great resort of the Indians." While Ellis and his traveling comapnions awaited a gale to sweep their schooner westward, they viewed a line of mounds stretching for a half mile along the beach. Ellis noted that the mounds were topped by wooden frames, which he postulated were "evidently for a game of athletes at jumping ... their tracks were abundant proof of the game, at which it appeared they had been exercising, only a day or two before our visit." Ellis' account suggests that the North Manitou landscape may have held additional cultural significance for the local American Indian population.

Euro-American Settlement

Over-trapping of fur-bearing species, combined with a collapse in the European market for felt, precipitated the disintegration of the Great Lakes fur trade during the late 1820s—an event that in turn seriously eroded the economic stablilty of the region's American Indian inhabitants.⁵³ By the mid-1830s, the Great Lakes fur economy was substantially defunct. In its place, a new economy based on agriculture and maritime commerce was developing, sputred by the opening of the Erie Canal in 1825. The long-term viability of the semi-sedentary settlement pattern of the Ojibwa and Ottawa was undermined further by mass migration of Euro-Americans into the tribes' winter hunting grounds in southern Michigan (figure 2.5). Under extreme political and economic pressure to sell their lands to the U.S. Government, the Ottawa relinquished claim to the northwestern third of Michigan's Lower peninsula and the entire Upper Peninsula in 1836, formally opening the Sleeping Bear Dunes area to Euro-American settlement.54

The off-shore islands of Lake Michigan were among the first locations in northern Michigan to be colonized by Euro-Americans. The first non-Indian inhabitant of North Manitou Island may have been an unmarried man named Joseph Oliver who moved to the island during the 1820s to hunt and fish. 55 By the early 1830s, Euro-American settlers, especially immigrants from New England, Ireland, Scandinavia, and the German states, also began settling in the coastal areas of northwestern lower Michigan, establishing missions, trading posts, and cabins among the area's American Indian inhabitants. Because water was the principal mode of transport during the early nineteenth century, settlement occurred along the shoreline and along navigable waterways. The sheltered channel between the Manitou islands and the mainland subsequently became an important shipping lane known as the Manitou Passage. Within a decade after the opening of the Erie Canal, numerous wood-burning steamers

⁵¹ Haswell and Alanen, Garden Apart, 23-24.

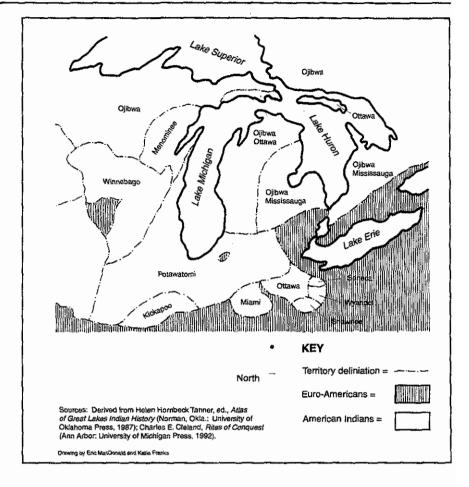
⁵² Albert G. Ellis, "Fifty-four Years' Recollections of Men and Events in Wisconsin," Report and Collections of the State Historical Society of Wisconsin 7: 232-233 (1876).

⁵³ Cleland, Rites of Conquest, 180.

⁵⁴ Haswell and Alanen, Garden Apart, 25; Gilbert/Commonwealth, "Cultural Resource Assessment of Proposed Rehabilitation of the Platte River Campground," 25; Cleland, Rites of Conquest, 225-228. Under terms of the 1836 Treaty of Washington, the U.S. Government retired the nation's outstanding debts, and promised financial support for schools, agricultural programs and missions, and yearly cash payments.

⁵⁵ Rita Hadra Rusco, North Manitou Island: Between Sunrise and Sunset (n.p.: Book Crafters), 26.

Figure 2.5. Euro-American and American Indian settlement areas, ca. 1830.



were plying the waters of the Great Lakes. A few industrious Yankee pioneers established outposts on the islands and began cutting timber to supply lake steamers with fuel wood.

Accounts dating from the early- to mid-nineteenth century suggest that much of the North Manitou Island landscape then supported a dense cover of northern hardwood forest. At the time of Euro-American settlement, the dominant species in this community probably were eastern hemlock (Tsuga canadensis), American beech, and sugar maple, with patches of northern conifers occurring on steep, north-facing slopes. Such coniferous stands may have consisted mostly of white cedar, balsam fir (Abies balsamea), and white birch, interspersed with striped maple (Acer pensylvanicum). 56 Poorer soils near the shoreline probably supported a mixed forest of conifers and hardwoods. The relict lake plain and beach ridge along the island's eastern side probably was covered by an extremely diverse coastal forest consisting of white pine (Pinus strobus), red maple (Acrer rubrum), white birch, and hemlock, with scattered sugar maple, big-tooth aspen (Populus grandidentata), white cedar, balsam fir, and red oak (Quercus rubra). Areas of sandy soils, or highly eroded slopes, probably supported only sparse, low-growing vegetation, as did the dunes along the coastal margin.57

The beauty of these forested, island landscapes did not go unoticed by early Great Lakes travelers. In one of the earliest written

⁵⁶ The area known as the "Pot Holes," a series of spring-fed, concave depressions that have northern exposures, currently supports a northern conifer forest community dominated by balsam fir and white ash (Fraxinus americana).

⁵⁷ There has been no study of the historic vegetation of North Manitou Island. The description given here is derived from the analysis of the island's current flora completed in 1983 by Hazlett and Vande Kopple, the descriptions published during the late nineteenth- and early twentieth-centuries by Henry C. Cowles, Harry Nichols Whitford, and Samuel Monds Coulter, and the original notes of surveyor Orange Risdon, who also visited the island in 1847.

Legends of Sleeping Bear

The dramatic terrain of the Sleeping Bear Dunes region has long had a spell-binding quality. During the late nineteenth and early twentieth century, Euro-Americans delighted in repeating "old Indian" legends and myths about the landscape, a trend that converged with efforts to romanticize local scenery and capitalize on the region's potential as a summer resort. An early-twentieth-century version of the most popular, most often-repeated legend about the origin of Sleeping Bear Dune and the Manitou islands is given below. It is followed by a less well-known (perhaps less romantic) explanation. Divorced from their context in Anishnabea cosmology and mythology, these accounts become merely quaint, fantastical stories that caricature and belittle the richness and intricacies of Anishnabed culture and belief systems.1 Yet the enduring appeal of such stories reveals the extent to which multiple layers of cultural meaning remain embedded within the landscape of the Sleeping Bear region.

Legend of the Sleeping Bear

Many years ago the Wisconsin shore of Lake Michigan suffered a famine so great that even the animals died of want.

A mother bear and her cubs walked the beach for days, gazing with wistful eyes across the deep waters at the verdant shores of Michigan, longing to reach them, but not daring to make the attempt. Eventually hunger overcame timidity and mother bear with a cub at each side, struck out. At first fortune favored the three. Nearer and nearer approached the goal as the mother's words of encouragement urged on the weary, nearly famished cubs; they did their very best.

When only twelve miles from the land of plenty, the mother's heart was rent as she saw a babe sink. With the remaining cub she struggled to gain the beach. Two miles of slow dragging and the second of her cherished ones sank.

The mother reached the beach and crept to a resting place where she lay down facing the restless waters that covered her lost ones. As she gazed, two beautiful islands slowly rose to mark the graves. These were called the Manitous—the home of the departed spirits.

To this day the Sleeping Bear is pointed out to all voyagers up and down the great lake.

The Great Muckwah (Bear)

From the land of the Illinois word came to the tribes of Michigan that a giant black beer had made its appearance and was killing many people and devastating the country. In vain had the boldest hunters essayed to match their strength and skill with that of the great "muckwah." It was said that he was so large and powerful that he paid no attention whatever to arrows or spears; but knocked over the strongest warriors with a mere slap of his huge paw and devoured men, women and children. All the country was in alarm and people fled from their homes to places of safety.

No calamity of equal importance had occurred since the great famine or the days of the flood.

Sogimaw, the most noted hunter of the Ottawas, was prevailed upon to seek the monster and slay him. Sogimaw was gone a fortnight and returned with the word that he had seen Muckwah; but if he were ten times as strong and as big as twenty more men like himself he would still be no match for the animal.

The people all shuddered at his story; and were further terror-stricken when the report came that the giant bear was making his way northward, leaving death and desolation in his wake. They huddled together in the wigwams, quaking with fear at every little noise, thinking it might be Muckwah ready to pounce upon them.

Mondapee, an old brave who towered head and shoulders above his companions—a veteran who had been able to over-power all his adversaries, laughed and said, "Do not be alarmed, my children; I will go forth and kill Muckwah."

With his heaviest warclub, arrayed in his

famous fighting costume, Mondapee sallied forth amid the plaudits of his people. For six days nothing was heard from him; but horrible stories still reached his tribesmen regarding the depredations of the great bear. So a searching party was sent out for the warrior. Not very far from his home in the forest, near a clump of hemlock trees, they found Mondapee's warclub and a few belongings. He had been torn to pieces and devoured by Muckwah.

A day or two later a little girl ran breathless into her parents' wigwam saying that she had seen Muckwah; that he had killed the two companions with whom she was playing, but by running swiftly through the bushes she herself had managed to escape. When asked to describe the monster she said he was taller than the highest wigwam and longer than six canoes placed end to end.

Frantically the people hid themselves in caves and in other out of the way places. Any person who had the temerity to stray away to any distance generally disappeared forever; and if they were so fortunate as to return it was always with additional tales of rapine and murder.

Wily and crafty runners were sent out over the country in an effort to band the inhabitants together for a unified attack upon Muckwah; but before the plan could be put into execution the ferocious beast attacked three of the largest villages in the proposed federation and destroyed every wigwam. It seemed as though the monster was destined to crush out all human opposition, and the population was in despair.

A few days after this cataclysm, however, it was reported that Muckwah, satiated with his crimes and misdemeanors, had curled up on the shore of the lake to take his long winter nap. Now was the time for action! Councils were held and vast bands of warriors assembled; huge flint-tipped arrows were hastily manufactured and giant spears devised; war dances were the common pastime, and soon the signal smoke arose from every hilltop.

In the meantime, while all these vast preparations were going on, Muckwah was overpowered and conquered; not by warriors, but by a gentle maiden, who to save the people, carried a potion from an old sorceress, and creeping cautiously over the sand dunes, placed in carefully at the nostrils of the bear. Muchwah was soon overcome by the powerful fumes and expired with scarcely a struggle.

He lies to this day where his death took place, on the east shore of Lake Michigan, where he may be seen from passing boats at a point called Sleeping Bear.

Source: John C. Wright, Stories of the Crooked Tree, Harbor Springs, Mich.: Lakeside Press. 1915.

[†]For academic accounts of Anishnabeg mythology and folklore see Victor Barnouw, Wisconsin Chippewa Myths & Tales and Their Relation to Chippewa Life (Madison: University of Wisconsin Press, 1977); Charles E. Cleland, Rites of Conquest: The History and Culture of Michigan's Native Americans (Ann Arbor: University of Michigan Press, 1992), pp. 1-73; Theresa S. Smith, The Island of the Anishnaabeg: Thunderers and Water Monsters in the Traditional Ojibwe Life-world (Moscow, Idaho: University of Idaho Press, 1995). For an attempt to situate traditional Anishnabeg beleif systems in a contemporary cultural context see Basil Johnston, The Manitous: The Spiritual World of the Ojibway (New York: Harper Collins, 1995)

accounts of the local scenery, Margaret Fuller praised the natural beauty of the Manitou islands. Writing in 1843, on a "most beautiful beach of smooth white pebbles, interspersed with agates and cornelians [sic]," Fuller remarked: "No one lives here except woodcutters for the steamboats. I had thought of such a position, from its mixture of profound solitude with service to the great world, as possessing an ideal beauty. I think so still, even after seeing the wood-cutters and their slovenly huts." In 1846 poet William Cullen Bryant echoed Fuller's assessment. He marveled at the natural wonders of "the upper Maneto island" when his steamer stopped there to take on wood. Wrote Bryant:

"... we landed and strolled into the forest. Part of the island is high, but this, where we went on shore, consists of hillocks and hollows of sand, like the waves of the lake in one of its storms, and looking as if successive storms had swept them up from the bottom. They were covered with an enormous growth of trees which must have stood for centuries." 59

Indeed, the island's natural resources, especially its forests, first attracted the attention of Euro-American settlers in the first half of the 19th century.

The writings of Fuller and Bryant, and the activities of the area's first wave of Euro-American presaged a new era in the history of the North Manitou Island environment. At the beginning of the nineteenth century, the island landscape probably existed much as it had for the previous three millennia, since at least the end of the Antithermal episode. The activities of prehistoric humans, and American Indians during the Historic Contact period, certainly affected the ecological and aesthetic character of the landscape. However, both the scale and the nature of such impacts were so subtle as to seem insignificant in comparison with the massive environmental change brought about by Euro-Americans during the midnineteenth century. Such change reflected a radically different environmental ethic-a wholly different conception of human nature, of the natural world, of the cosmos—one that was, perhaps, most candidly reflected in the rectilinear subdivision of the earth's surface into standard, marketable units (figure 2.6). Land, and the community of life that it supported, was a commodity to be traded, exploited, or engineered for the exclusive benefit of an individual land owner.

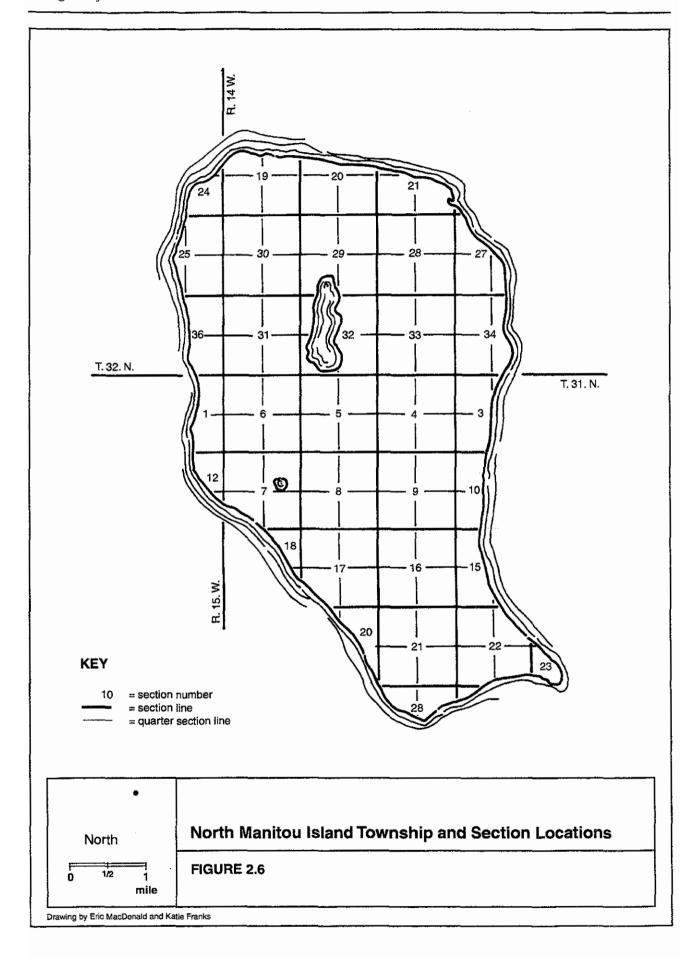
The Cord Wood Era on North Manitou Island

The islands and coastal harbors of northern Lake Michigan became important nodes in the early commerce of the Great Lakes, serving as trading posts and as way-stations for settlers and goods bound for mainland ports. The first wooding station in the Manitou Passage was established in the mid-1830s when William Burton began cutting cord wood on South Manitou Island. 60 In 1847, John La rue moved from Chicago to the Manitou Islands, and "finding the climate favorable

58 Margaret Fuller, Summer on the Lakes, in 1843 (Urbana and Chicago: University of Illinois Press [1844] 1991), 18-19. Fuller was 33 years old when she recorded this journey into what then was considered the far western frontier. Along with Emerson and Thoreau, she was a member of the Transcendental circle, and had worked with Emerson on editing the Dial since 1840. Although she had authored numerous essays, poems, and sketches, Summer on the Lakes, in 1843 was Fuller's first original book-length work. She characterized it as a "poetic impression," implying that she did not rely solely on her memory for the details described in the book.

⁵⁹ William Cullen Bryant, The Letters of William Cullen Bryant. Vol. 2. Edited by William Cullen Bryant II and Thomas G. Voss (New York: Fordham University Press, 1977), 444.

60 Roger L. Rosentreter, "Leelanau County," Michigan History, September/October 1985, 8-11; Brenda Wheeler Williams, Arnold R. Alanen, and William H. Tishler, 'Coming through with Rye': An Historic Agricultural Landscape Study of South Manitou Island at Sleeping Bear Dunes National Lakeshore, Michigan (Omaha: Midwest Field Area, National Park Service, 1996), 27.



to his health, Mr. La rue commenced trading with the Indians, and the next year moved his establishment over to the mainland," locating at what is now Glen Arbor. In his quest for health, La rue may have been attracted by the sense "profound solitude and ideal beauty" that had so captivated Margaret Fuller. La rue was not alone on the island, however. Sprague's nineteenth-century history of the Grand Traverse region notes that when La rue established his trading post there was a pier and a wharf on both Manitou islands. Thurlow Weed, who visited North Manitou during the same year when La rue arrived, reported that one family was living on the island, and forty men were employed cutting and hauling wood.

The North Manitou pier mentioned by Sprague probably belonged to Nicholas Pickard, who commenced a large-scale woodcutting enterprise on the island sometime between 1842 and 1846. ⁶⁴ An undated Leelanau Enterprise newspaper item on file at the Leelanau County Historical Society states that Pickard's initial wood-cutting crews were mostly local American Indians. ⁶⁵ Pickard located his wooding operation along the southeastern shore of the island at a site that he purchased in partnership with Charles Stringham. Neither Pickard nor Stringham owned timber land in this vicinity, suggesting that they were harvesting wood from land that they did not own. In 1849, however, Pickard and Stringham did purchase a significant parcel of land in Section 34, T32N, R14W, which was located in the northern portion of the island. Pickard managed his wood-cutting operation in partnership with his brother, Simon, who joined him in the business in 1846. ⁶⁶

Pickard's North Manitou Island wooding station was well established by the time William Cullen Bryant's steamer stopped there in 1846. In addition to commenting on the splendor of the island's natural scenery, Bryant reported that "on the shore were two loghouses inhabited by woodsmen, one of whom drew a pail of water for refreshment of some of the passengers from a well dug in the sand by his door." A year later, government land surveyor Otange Risdon described Pickard's wharf as "one hundred fifty feet by sixty feet built on piles on the southeast quarter of section fifteen near the survey line." Risdon also noted that "there were two dwelling houses, a grocery, blacksmiths [sic] shop, storehouse and other buildings—a good establishment." 68

Risdon's notes also provide detailed information about the North Manitou's vegetation at the time of Euro-American settlement. On the island's eastern coastal plain, Risdon recorded a forest of hemlock, beech, and sugar maple intermixed with white pine, red pine (Pinus resinosa), and scattered white cedar and birch. Further inland, the forest was dominated by large hemlock, beech, and maple trees. In certain places, especially on ridges, Risdon recorded numerous, large hemlock trees, beneath which grew "very little herbage." In other places Risdon encountered "a great growth of Herbage on the ravines & slopes of hills faring [sic] the East &

⁶¹ Elvin Sprague, The Grand Traverse Region, Historical and Descriptive (Chicago: H. R. Page & Co., 1884), 223; 334.

⁶² Sprague, Grand Traverse Region, 223.

⁶³ Robert T. Hatt, J. Van Tyne, L. C. Stuart, C. H. Pope, and A. B. Grobman, Island Life: A Study of the Land Vertebrates of the Islands of Eastern Lake Michigan (Cranbrook Institute of Science, Bulletin No. 27, 1948), 8, citing J. B. Mansfield, History of the Great Lakes, vol. 1. (Chicago: H. H. Beers Co., 1899), 209, 212-213.

⁶⁴ Rusco, North Manitou Island, 27; David L. Fritz, "History Data Report on North Manitou Island, Leelanau County, Michigan" (Denver: U.S. Department of the Interior, National Park Service, 1987), 3.

^{65 &}quot;Yesterday in Leland," Leelanau Enterprise, n.d., Betty Kramer Collection, Leelanau County Historical Society, Leland, Michigan. The American Indian members of Pickard's work crews probably came from the Ottawa and Ojibwa settlements that remained on the mainland during this period.

⁶⁶ Rusco, North Manitou Island, 29.

⁶⁷ Bryant, Letters, 444.

⁶⁸ Orange Risdon, survey notes [1847], transcribed by Charles Kruch, Sleeping Bear Dunes National Lakeshore, Empire, Mich. 1989.

⁶⁹ Orange Risdon, "Original Survey Notes," 1847, transcribed by Charles Kruch, 1989, Sleeping Bear Dunes National Lakeshore, Empire, Mich.

North Manitou Island as a Wooding Station in 1847

Thurlow Weed, editor for the Albany, New York, Evening Journal, traveled in July 1847 from Buffalo to Chicago aboard the steamship Empire, and returned aboard the St. Louis. Weed published an account of his journey in a series of letters to the Evening Journal. Two of Weed's letters mention stops at North Manitou Island.

3 July

At 7 o'clock this evening we touched at one of the Manitou islands for wood. At this point all the steamers 'wood.' This island, some three miles by ten in extent, is only inhabited by the few persons employed in cutting and hauling wood. It is not even inhabited by animals. I saw none of the feathered race. Reptiles are seldom seen. And in the absence of all these, mosquitoes, finding no one to toment, come not to the Manitou island.

9 July

Our boat was headed for the North Manitou Island, which, being only thirty-five miles distant, we reached long before sunset. On the north-west side of this island the sand banks rise, in some places, full two hundred feet above the surface of the lake, and, what is singular, this island of sand is without its 'sand beach.' The shore is almost as bold, where the banks are high, as that in our Highlands. We were told that there is a large lake upon the summit of this island, abounding with trout, but on landing I found that this lake was upon the level part of the island, and even with the surface of Lake Michigan. This sand soil produces nothing but wood, though I do not understand why a soil that sustains a maple and beech forest should not bear wheat, corn, and vegetables. There are some forty men employed here in cutting and hauling boat wood, for which \$1.75 per cord is paid. The only family here is from Granville. Washington County, Among the privileges they regret is that of voting a Whig ticket. From the last of October until May, they know nothing of what is passing in the world. We left the Manitou Island at 8 o'clock.

Source: John Brandt Mansfield, ed. and comp., History of the Great Lakes, vol. 1 (Chicago, J. H. Beers, 1899; Cleveland, Freshwater Press, 1972), 212-213.

North."⁷⁰ Scattered throughout the forested landscape were areas that were "not very well wooded" and "hills covered with Ground Hemlock."⁷¹ At Lake Manitou, Risdon recorded a belt of "Hemlock Cedar & Fir bordering lake," with adjacent lands that were "good meadow land lightly Timbered Cedar, Birch, Ash, Elm, Maple etc. ... pleasantly rolling with gentle swells ..." ⁷²

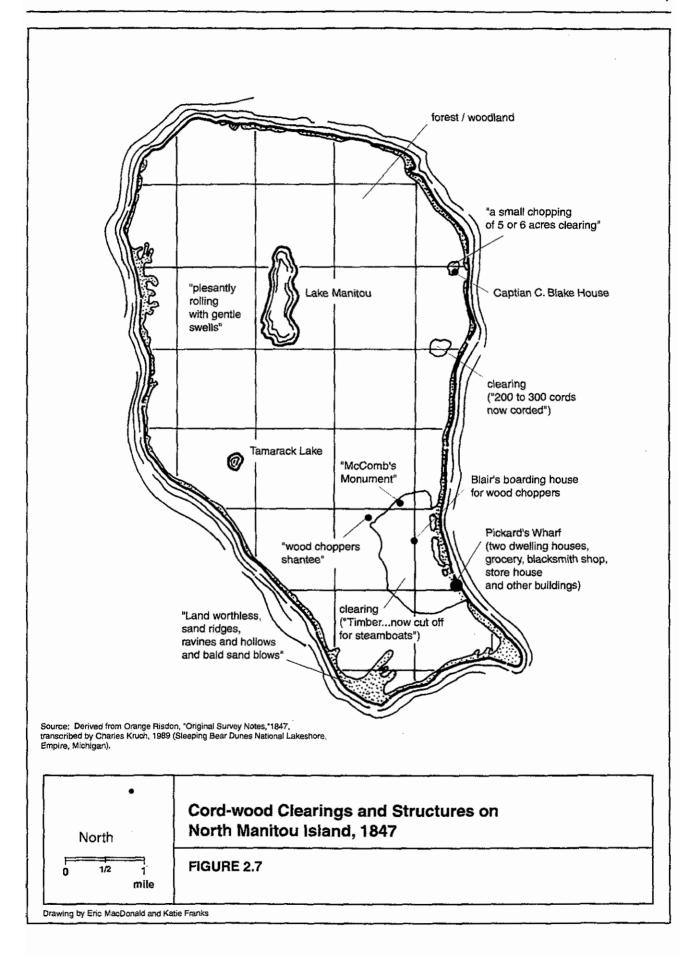
Risdon's notes indicate that substantial portions of the forest in the vicinity of Pickard's dock already had been cleared by 1847 (figure 2.7). A quarter-mile inland, near the southeastern shore of the island, Risdon encountered an area that he described as "timber cut off & no other trees." A half-mile to the north, on a ridge near "Blair's Boarding house for wood choppers," Risdon described the forest as "Beech, Sugar, Hemlock," but noted that the timber was "now cut off for Steam Boats." Risdon's accounts of the landscape suggest that the predominant strategy of the island's wood choppers was to clear-cut large swaths of forest, moving

⁷⁰ Risdon, survey notes, between Sections 20 & 21, T31N, R14W.

⁷¹ Risdon, survey notes, between Sections 8 & 9, T31N, R14W. The plant that Risdon denoted as "ground hemlock" may be *Taxus canadensis*, a species that, according to Hazlett and Vande Kopple has been largely extirpated from North Manitou by the island's non-native deer herd. See Hazlett and Vande Kopple, *Terrestrial Vegetation*, 44.

⁷² Risdon, survey notes, between Sections 31 & 32, T32N, R14W.

⁷³ Ibid., between Sections 15 & 16, T31N, R14W.



inland from coastal areas and leaving little more than brushwood in their wake.

Nicholas and Simon Pickard later established a second dock at the shoreline of Section 34, T32N, R14W. This northern wooding station may have begun operation before Pickard and Stringham purchased the property in 1849, as Risdon's survey noted a significant "cord wood chopping" area in the vicinity to the south, and to the north "a small chopping of 5 or 6 acres" near a house occupied by "Captain C. Blake." The Pickards expanded their North Manitou wood cutting venture during the 1850s. Their wooding station on the eastern shore of the island became the central node of settlement on the island. Shortly after the state legislature organized the Manitou Islands into a separate township within Manitou County in 1855, the first township meeting was held in "the store house of Pickard & Brother on North Manitou."75 Also, around 1855 the Pickards constructed a new pier on the western side of the island. As with his eastside operations, Nicholas Pickard purchased only a 52-acre parcel along the western shoreline, which provided little more than a site for a pier and wharf. He probably obtained logging rights to most of the timber on the surrounding lands through business contracts with neighboring property owners.76

Timber extraction on North Manitou Island not only became more extensive during the 1850s, but it also evolved into an industry capable of producing value-added commodities. In 1855, Cornelius Jones built a saw mill on the eastern side of the island, and the following year Edwin Munger constructed another mill on the western shore near Pickard's dock.⁷⁷ The construction of these mills effectively extended the market for the island's timber resources beyond the demand generated by steamship traffic. As a raw material, Pickard's North Manitou cordwood fueled the transportation system that conveyed the island's milled lumber to the booming Chicago market.⁷⁸

Nicholas Pickard purchased large tracts of timbered land in 1855, and again in 1857, thereby becoming the largest land owner on North Manitou Island. By 1862, Pickard had acquired more than 1,200 acres of island timber land. The 1860 federal population census recorded 270 Euro-American persons on North Manitou, half of whom were immigrants from foreign countries, most from Germany or Scandinavia. In addition, the 1860 census recorded 180 American Indian inhabitants dispersed throughout the islands of Manitou County. The proportion of European immigrants on North and South Manitou Islands was nearly twice that of the mainland, and only two mainland townships, Centerville and Glen Arbor, had greater total numbers of immigrants than North Manitou Island.

Newly arrived immigrants may have been attracted to the islands by the abundance of wage jobs in the cordwood trade, which remained viable on North Manitou Island through the 1860s. North Manitou's 1860 population included 39 day laborers, most of whom

⁷⁴ Ibid., between Sections 27 & 34, T32N, R14W.

⁷⁵ Rosentreter, "Leelanau County."

⁷⁶ Rusco states that the west-side pier was constructed by Simon Pickard in 1854. Fritz notes that Nicholas Pickard purchased the dock property in 1855, and suggests that the structure was built sometime after that date. See Rusco, North Manitou Island, 29; David L. Fritz, "History Data Report" 4.

⁷⁷ Rusco, North Manitou Island, 29.

⁷⁸ For a more detailed description of the Great Lakes timber industry, its relationship to the growth of the city of Chicago, and its environmental impact on the region, see William Cronon, Nature's Metropolis: Chicago and the Great West (New York: W. W. Norton, 1991).

⁷⁹ Fritz, "History Data Report," 4.

So U.S. Census Office, "Eighth [1860] Census of the United States—Population," microfilm copy of manuscript schedules, Library of Michigan, Lansing. The 1870 population census recorded no American Indian inhabitants on North Manitou Island. Appendix C contains tabulations of the federal population censuses of North Manitou for decades 1860, 1870, 1880, 1900, 1910, and 1920.

⁸¹ Haswell and Alanen, Garden Apart, 36.

probably were employed as wood cutters. In addition there was one fisherman/farmer, ten farmers and seven farm laborers, most of whom probably were connected to the various island wooding or lumber enterprises. ⁸² Nicholas Pickard owned a large farm on the island, the only agricultural operation for which the 1860 census taker collected data. The other important enterprise on North Manitou Island during the 1860s was fishing, which occupied three of the island's immigrant families. ⁸³

Cord wood and lumber remained the primary industry on North Manitou Island during the decade following the 1860 census. According to Munn, George F. Aylsworth, Sr., assumed operation of Simon Pickard's west-side wooding station and dock around 1857. Aylsworth acquired forty acres near the southwestern corner of Lake Manitou in 1864, and eventually took over the logging operations on the western side of the lake, perhaps consolidating his control by 1866. A small settlement known as "Aylsworth" developed around the west side dock.84 Nicholas Pickard also operated a saw mill on the eastern side of the island during the 1860s.85 It seems likely, however, that the island's timber resources were substantially depleted by sometime during the 1860s. At the time of the 1870 federal census, the island's population had declined by nearly two-thirds, to 91 inhabitants. 86 The proportion of European immigrants on the islands remained high, however. Combined, North and South Manitou islands had an immigrant population of 95 persons, which represented 57 per cent of their total population. In contrast, the proportion of foreign-born residents of the region as a whole was only 28 per cent.87

It is likely that wood cutting drastically impacted the ecology of North Manitou Island. Because most of the island's timber was intended for use as fuel, wood cutters probably were nonselective in choosing the species and size classes of trees to remove. Except in places where topography made timber extraction difficult, most areas of the vast, inland virgin sugar maple-beech-hemlock forests, and virtually all of the more accessible mixed coastal forests, probably were removed by clear-cutting, leaving only small saplings and shrubby understory growth. The wood cutters drastically altered the light and micro-climatic characteristics of the island landscape, causing the demise of countless woodland understory plants which were replaced by open-community herbaceous species and pioneering woody species such as juniper, black cherry, and birch. European settlers also brought with them Eurasian weed species, which likely colonized the extensive patches of open land left by the timber cutters. Such transformation of the environment also affected the island's animal populations. In effect, the extensive timber-cutting activities of the cordwood era resulted in a radical alteration of the island's ecosystems.

Although none of North Manitou Island's residents reported their occupations as farmers in the 1870 federal census, two of them,

⁸² U.S. Census Office, "Eighth [1860] Census of the United States—Population."

⁸³ U.S. Census Office, "Eighth [1860] Census of the United States—Population;" U.S. Census Office, "Eighth [1860] Census of the United States— Schedule 4, Productions of Agriculture," microfilm copy of manuscript schedules, State Archives of Michigan, Lansing.

84 Fritz, "History Data Report," 6; Jim Muhn, "Historic Resource Study: Sleeping Bear Dunes National Lakeshore, Michigan," Jill York O'Bright, ed., (Denver: National Park Service, [1979] 1984), 97-98; According to Muhn, Aylsworth took over Pickard's dock in 1857. The dock closed in 1873. He sold his west-side land holdings, including the dock location, in 1884.

85 Fritz, "History Data Report," 6. Pickard's mill was located in the vicinity of the current North Manitou Village. The approximate site may be determined from a tract of land identified from an 1874 land transaction between Nancy Pickard and the U.S. Treasury. A copy of this document is located at Sleeping Bear Dunes National Lakeshore headquarters, Empire, Mich.

⁸⁶ U.S. Census Office, "Ninth [1870] Census of the United States—Population;" microfilm copy of manuscript schedules, Library of Michigan, Lansing.

⁸⁷ Haswell and Alanen, "Garden Apart," 49. including Nicholas Pickard, did produce significant quantities of agricultural commodities. In fact, the North Manitou farms, which together encompassed 620 acres of improved land, were significantly larger and more highly developed than farms on the mainland, probably because vast tracts of land had been cleared for fuel wood. On these lands, farmers replaced the native woodland vegetation with new, domesticated Eurasian cultigens such as rye, barley, oats, and wheat, as well as domesticated New World plants such as potatoes and corn. They supplemented the island fauna with domesticated horses, sheep, cattle, hogs, and poultry.

Subsistence Farming and Maritime Navigation

The depletion of timber resources, along with the increased use of coal-burning steam engines in Great Lakes transport, precipitated the end of the cord wood era on North Manitou Island. George Aylsworth abandoned his lumber operation on the western side of the island during the early 1870s. ⁸⁹ Nicholas Pickard continued his island wood cutting business into the mid-1870s, although probably at a reduced intensity. He may have resided in Leland or Buffalo, New York, during this time, while his brother Simon administered the island operations. Following Nicholas Pickard's death in 1876 at the age of 59, his widow, Nancy, retained his North Manitou Island property. During 1877 and 1880 she purchased more than a thousand acres of additional island lands, probably for speculative purposes; she began selling the property between 1881 and 1886. ⁹⁰

In the wake of the wood cutters, settlers came from New England, Scandinavia, and Germany to make farms on the cut-over land (figure 2.8). The first homestead claim for land on North Manitou Island was filed in 1875 by Andrew Anderson, an immigrant from Sweden who had been employed on the island in 1870 as a fisherman. Three years later Gustaf and Mary Swan, also Swedish immigrants, filed a homestead application for land in the southern portion of the island, not far from Andrew Anderson's claim. The 1880 federal population census counted seven farmers on North Manitou: Andrew Anderson, Gustav O. Swan, Frank Hanson, Larson Larson, Francis Etli, John Strang, and Baptist Tramel. Appendix D catalogs the characteristics of North Manitou's homesteads, as described by the claimants in official homestead documents.

Following the demise of the cord wood trade, steamship traffic on the lakes increased, and the Manitou islands remained vital links in the Great Lakes maritime transportation system during the last quarter of the nineteenth century. Nicholas Pickard and others established a volunteer rescue station on North Manitou Island in 1854. Reflecting the island's growing importance in maritime navigation, an official U. S. Lifesaving Service Station was established in 1874 on a 20' x 40' parcel near Pickard's wharf in Section 34, T32N, R14W, an area that later became known as North Manitou Village. In 1877 the U.S. Life-Saving Service built a life boat station

88 U.S. Census Office, "Ninth [1870] Census of the United States—Schedule 3, Productions of Agriculture," microfilm copy of manuscript schedules, State Archives of Michigan, Lansing; Haswell and Alanen, Garden Apart, 77.

⁸⁹ Rusco states that Aylsworth discontinued his business in 1872; Muhn claims that Aylsworth closed his west side dock in 1873. Fritz further reports that Aylsworth sold his west-side land holdings, including the dock location, in 1884. See Rusco, North Manitou Island, 29; Muhn, "Historic Resource Study," 97-98; Fritz, "History Data Report," 6.

90 Fritz, "History Data Report," 6-7.

⁹¹ Manuscript schedules, federal population census, 1870; Homestead Entry #7013, Final Certificate #5308, National Archives and Records Administration, Washington, D. C. Haswell and Alanen (Garden Apart, 40) state that the first homestead entry on North Manitou Island was made by Richard Kitchen in 1863. Kitchen's entry, however, was for land on South Manitou Island.

⁹² U.S. Census Office, "Tenth [1880] Census of the United States—Population," microfilm copy of manuscript schedules, Library of Michigan, Lansing.



proximate to this parcel. On June 7 of that year, Daniel Buss, who was Nancy Pickard's brother, was appointed the first captain of the all-volunteer crew on North Manitou. The following year, the station had a paid crew of six men. 93 Throughout the late nineteenth century, the U.S. Life-Saving Service improved the North Manitou Island station. In 1887 the service constructed a dwelling at the station to house the crew. Other crew members with families constructed small, vernacular houses on or near the station, and the surrounding area began to resemble a small village. At the extreme southeastern tip of the island, the U.S. federal government constructed a lighthouse complex in 1896. The light, housed in a clapboard-clad, wood-frame tower, was fully functional by mid-September 1898.94

Although ships no longer docked at the island as frequently as they did during the middle of the century, connections with distant ports remained strong during the late 1800s. Due to the volume of ship traffic, it was frequently easier for islanders to travel to, and maintain communication and business linkages with, major Great Lakes cities such as Chicago, Milwaukee, and Detroit, than with closer mainland ports like Traverse City, Northport, or Manistee. The most important mainland port for North Manitou Island was Leland, where many island inhabitants and property owners, including Nicholas Pickard, chose to reside at least part of the year.

Figure 2.8. Immediately after the cord wood era, most of North Manitou Island's farms were small, subsistence operations developed on cut-over land. Many of the buildings on these early farms probably were constructed with a combination of materials, including logs, drift wood from shipwrecks, and scrap lumber from the island's sawmills.

⁹³ Rusco, North Maniton Island, 19; William Herd and Kimberly Mann, "National Register of Historic Places Registration Form: North Manitou Island Life-saving Station," (Empire, Mich.: National Park Service, 1994).

⁹⁴ Fritz, "History Data Report," 87-88.

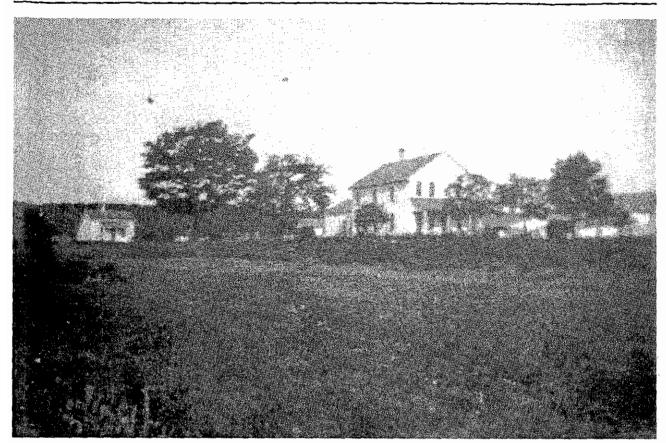


Figure 2.9. The large farmhouse built by Silas R. Boardman, as it appeared during the early twentieth century. Boardman's farm also included two or three smaller houses, several barns and outbuildings, and fenced livestock enclosures.

⁹⁵ Leelanau Deeds, Liber 21, p. 326, Stella J. Platt to Silas R. Boardman; Shirley Foote Alford, untitled manuscript ca. 1920s, typed by Josephine Hollister, n.d., Betty Kramer Collection, Leelanau Historical Museum, Leland, Mich.; Rusco, North Maniton Island, 55;

Fritz "History Data Report," 12, 43.

Gentleman Farmers

North Manitou Island's economic and social ties with Chicago remained particularly strong during the late nineteenth and early twentieth centuries. While poor, immigrant farmers struggled during the 1880s to develop viable homesteads on the sandy soils of the southern end of the island, Silas Boardman, a retired Chicago banker, established a large-scale livestock farm near the North Manitou Village (figure 2.9). "In search of health," Boardman arrived on the island in 1884 and bought up large tracts of land, completing in 1890 a sizable purchase from Stella J. Platt for lands in sections 21, 22, 27, 28, 33 and 34 in T32N, R14W, and in sections 4, 10, and 31 in T31N, R14W.95 Boardman used his vast North Manitou acreage for free-range cattle grazing. Near the village he constructed a roomy farmhouse for himself, his wife Mary, and their daughters, Carrie and Stella, and son Walter. He also established a post office on North Manitou, becoming the island postmaster in 1888. On his farmstead Boardman constructed a complex of barns and stables to house his prized Percheron draft horses.96 The Leelanau Enterprise reported on the 1889 visit of a Chicago man to the "stock farm of Mr. S. R. Boardman where we were shown some very fine stock."97 Boardman probably used his business connections to secure transportation and a market for his beef cattle in the Chicago stockyards.

In addition to cattle ranching, Boardman was involved in another attempt at large-scale, commercial agriculture on North

⁹⁶ Alford, untitled manuscript.; Josephine Alford Hollister, "The Summer Resort on North Manitou Island," February 1989, Sleeping Bear Dunes National Lakeshore, Empire, Mich.; Leelanau Enterprise, 16 August 1888

⁹⁷ Leelanau Enterprise, 1 August 1889.

Manitou Island during the 1890s. A decade earlier, a fruit tree dealer named Frederic Beuham had begun developing a large experimental fruit orchard on his homestead claim located approximately one mile west of North Manitou Village. With the financial backing of Boardman and a Wisconsin firm identified as Mann Bros., Beuham substantially expanded his orchards. During the autumn of 1894, Stark Bros. Nursery Co., a well-known Missouri-based fruit nursery, supervised the planting of 1,500 fruit trees on Beuham's North Manitou Island land.98

A Landscape for "Pleasure and Recreation"

Although Beuham's 1894 orchard expansion was a significant event in the evolution of commercial agriculture on North Manitou Island, Silas Boardman's principal business venture on the island that year was a real estate development scheme. In collaboration with Chicagoans George W. and Carrie Blossom and Frederick H. and Mary Trude, Boardman developed an exclusive resort colony on a parcel of land adjacent to the village. Carrie Blossom, who was Silas Boardman's daughter, had spent many summers on the island during her youth, and during a summer visit in 1893 suggested the plan that led to the development of "Cottage Row." The following spring Boardman sold a parcel of land south of the U.S. Life-saving Service Station to George Blossom and Frederick Trude for five hundred dollars. Blossom and Trude apparently planned to divide the property into smaller lots that could be sold to their friends as building sites for summer homes. 100

Boardman attached covenants the deeds in order to control how the land was to be developed. The covenants stipulated that the parcel of roughly six acres was to be divided into ten eastfronting lots 102 feet wide by 300 feet deep, all of which were situated atop the ridge overlooking the beach. The area between the beach ridge and the lakeshore was to be reserved for a private park within which no buildings could be built "except boat houses and other buildings to be used for pleasure and recreation by the owners of the ten lots." Two sixty-feet rights-of-way, both running northsouth were reserved for roads along the front and rear lot lines. The covenants stipulated that the roads "shall not be fenced except at the pleasure of the owners except at the north and south boundary of the strip; fences with gates kept closed except to permit the user of the highway to pass through. ... owners may not interfere with public business." Lot owners also were granted free use of Boardman's pier "for their convenience and pleasure;" and a oneacre parcel "on the border of the "Little Lake" on Manitou Island called the 'Manitou Lake' for the purpose of erecting thereon boat _, wharfs [sic], and boat landings." On the lots themselves, buildings were restricted to "cottages with outbuildings, excepting refectories or dining halls with necessary compartments including sleeping rooms for the person or persons in charge thereof and the

⁹⁸ Leelanau Deeds, Liber 23, 168-169; Fritz, "History Data Report," 10. For more information about the business relationship between Beuham and Stark Bros. Nursery Co. see Chapter Three and Chapter Four.

⁹⁹ Hollister, "Summer Resort."

¹⁰⁰ Hollister, "Summer Resort."

Figure 2.10. Postcard view of North Manitou Island boardwalk, dated 15 October 1906. A wooden plank walkway, gas lamps, and shade trees lined the front of the private resort development known as "Cottage Row." The cottages occupied the beach ridge overlooking the Manitou Passage and the cluster of buildings that constituted North Manitou Village, including the U.S. Life-saving Service station, and the livestock farm of Silas Boardman.



describes the W. O. Greene plat.
Covenants in the deed from Silas R.
Boardman and wife to George Blossom and Frederick H. Trude dated 1 May 1894; Lot 6 sold to John H. Keating, 20 Nov. 1894. Leelanau Deeds, Liber 21, 326-328. 24 November, 1894. Silas R.
Boardman and Mary K. Boardman to Frederick H. Trude and George W.
Blossom of Cook County. All of Cottage Row for \$500. Copies of other lot sales are at the Sleeping Bear Dunes National Lakeshore headquarters, Empire, Mich.

102 Alford, untitled manuscript; Fritz ("History Data Report," 76) reports that this initial cottage was constructed on Lot No. 10. According to Josephine Hollister ("Summer Resort"), however, no structure was ever built upon Lot No. 10, a scenario that is consistent with other oral accounts and with physical evidence at the site. The first cottage, later known as "Monte Carlo," was built immediately north of the Cottage Row plat. It is now speculated that this cottage may have been designed by the young Chicago architect Frank Lloyd Wright for George W. Blossom. See Chapter Four.

103 Fritz, "History Data Report," 74.
Fritz also notes that the farmhouse previously was occupied by Silas Boardman's "elderly sisters."

¹⁰⁴ Hollister, "Summer Resort"; Leelanau Deeds, Laber 21, 350-351. servants."¹⁰¹ As part of the development scheme, Boardman installed a plank walkway and gas lights along the road in front of the cottage lots, and eastward along the road leading to the village dock (figure 2.10).

The "Cottage Row" plat was surveyed by W. O. Greene, a local surveyor who had an office on the mainland in Omena, Michigan. The ten lots were numbered sequentially, beginning in the south and ending with the northernmost parcel, which was closest to the road leading from the village pier into the interior of the island. The Blossoms and Trudes quickly set about developing their property. The May 17, 1894, issue of the Leelanau Enterprise reported that "Mr. Trude and Mr. Blossom of Chicago, were in town Tuesday and informs [sic] us that they are about to build some fine cottages on the North Manitou Island." The first cottage erected on the beach ridge was built immediately north of Lot No. 10 of Cottage Row during the fall of 1893 or the spring of 1894 by a Boardman family relative. 102 Onto Lot #3, the Blossoms moved a small frame farmhouse, which had previously stood in Silas Boardman's "farmhouse yard." 103 Two additional summer houses were built during the summer of 1894—the cottages of Howard W. Foote and his wife on Lot #5, and Frederick and Mary Trude on Lot #4. Foote sent two carpenters from Chicago to build his North Manitou Island residence. These men also may have been responsible for building the other cottages that summer, and one of the two, Nicholas Feilen, later became a permanent resident of the island. Some of the building materials for the Foote cottage, including stained glass windows, wooden moldings, and beadboard panels, came from dismantled exhibit booths from the Manufacturer's Building at the 1893 World's Columbian Exposition. John Herbert and Ellen Keating, who purchased Lot #6 from Blossom and Trude in November 1894, constructed a cottage on their parcel the following summer. 104

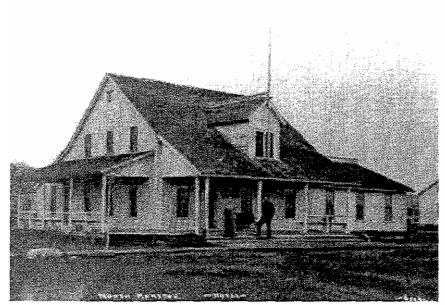


Figure 2.11. Hotel, North Manitou Island, ca. 1910s. The former residence of U.S. Life-saving Service keeper Daniel Buss was remodeled to function as a hotel and dining room. The hotel occupied a site on the beach ridge north of Cottage Row. Although not part of the Cottage Row plat, this structure served a vital function in the communal resort development scheme. The building continued to function as a lodging facility for island visitors until it was destroyed by fire in 1953.

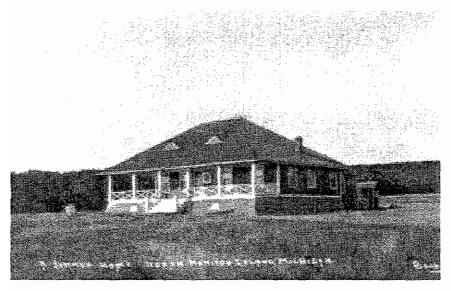


Figure 2.12. The house built on Lot #9 for Howard W. Foote in 1901.

Perhaps influenced by the structure built north of Lot #10, all of the cottages constructed during 1894-1895 (with the exception of the house moved from the Boardman farm) utilized similar floor plans: a porch spanning the full east facade that connected to a central, interior hall/living room flanked on both the north and south sides by two bedrooms. None of the cottages had kitchens or dining rooms. Instead, resorters took meals in a communal dining room, which was located north of the Cottage Row plat. The dining room structure originally was the home of Daniel Buss, the first captain of the island U.S. Life-saving Service Station. According to Shirley Foote Alford, either Boardman or Blossom moved the house to the Cottage Row site and enlarged it to serve as a communal dining hall and inn (figure 2.12). 106

¹⁰⁵ Hollister, "Summer Resort."

¹⁰⁶ Alford, untitled manuscript.

Between 1895 and 1896 two additional summer houses were built as part of the development. A large, one-and-a-half-story cottage was built on Lot #1, next to the edge of the "beech woods," for Mrs. William Shepard and her daughter Katherine. The design of the Shepards' shingle-style cottage allegedly was based on that of their former home in New Orleans. Next to the Shepards on Lot #2, a British couple, "Mr. and Mrs. Hewitt," built a smaller, gable-front, shingle-style cottage. The last cottage constructed during the initial development phase of Cottage Row was for Howard Foote, who sold his 1894 cottage on Lot #5 to S. W. McMunn in 1900. The following year, Foote built a new cottage on Lot #9 (figure 2.12). Completion of the second Foote cottage left only lots #7 and #8 vacant, although by this time both parcels had been sold to S. W. McMunn, and G. A. M. Liljencrantz, respectively. 107

A Testing Ground for a New Science

The natural beauty of North Manitou Island's forests, lakes, and sand beaches, as well as its special island-like sense of remoteness and solitude, attracted those wishing to escape the dirt, noise, and brisk pace of life that characterized growing Midwestern industrial cities like Chicago at the close of the nineteenth century. At about the same time, however, the island's natural qualities and relative isolation attracted several visitors for a very different reason: the pursuit of scientific knowledge. The Manitou islands were the first areas of the northwestern lower Michigan to be explored by early botanists, probably because they were readily accessible by steamer. Pioneer botanist George Engelmann obtained specimens during a trip in 1840. O. B. Wheeler collected red anemone (Anemone multifida) from North Manitou in 1866. E. J. Hill, a botanist from Indiana, collected shoreline plants from North Manitou in 1873, and later published some of his findings. During the mid-1880s, Frederick Wislizenus, son of the famed St. Louis botanist Friedrich Adolph Wislizenus, spent over a week on the island. Specimens from Wislizenus' collection from the island, including grass-pink (Calopogon tuberosus), pitcher-plant (Sarracenia purpurea), and flatleaved bladderwort (Utricularia intermedia), suggest that he investigated the Tamarack Lake area. 108

The ever-shifting dune landscapes of the Sleeping Bear region had long intrigued to Euro-American observers during the nineteenth century (figure 2.13). In 1823, Albert G. Ellis described North Manitou as "a mountain of sand," which featured "a beach some hundreds of feet wide, and a precipitous sand bluff in the rear ..." ¹⁰⁹ In an early account of the dunes of North Manitou Island, Captain Lauchlan Bellingham MacKinnon recorded the following remarks:

The [Manitou] islands are of extremely curious formation. Densely covered with wood, they are never-the-less composed entirely of sand. I was informed by Captain

¹⁰⁷ Fritz, "History Data Report," 73-76.

¹⁰⁸ Brian T. Hazlett, "Flora of Sleeping Bear Dunes," 140; E. J. Hill, "The Southern Limit of *Juniperus sabina*." Plant World 3(9):140 (1900).

¹⁰⁹ Ellis, "Fifty-four Years' Recollections," 232.

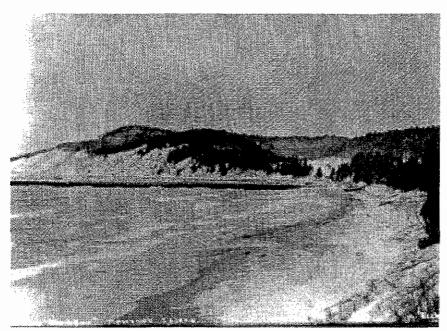


Figure 2.13. The dunes along the western shore of North Manitou Island constitute a landscape of ever-shifting landforms, harsh microclimates, and extreme environmental gradients. Early American ecologists were attracted to the lakeshore's dunal landscapes because of the distinctive biotic communities and rapid pace of environmental change that characterize such places. This photograph of North Manitou's western shore was taken ca. 1908 - 1915, approximately a decade after the area was studied by Henry Chandler Cowles and his students.

M'Comb of the U.S. Topographical Engineers that when employed in surveying this group he desired to plant a surveying station on the crest of a sandhill. On attempting to cut down certain bushes for the purpose he was much astonished to find that they were the tops of some cottonwood trees. From the still living foliage he came to the conclusion that the drifting sand had completely buried them alive; and believed that two years at the utmost was the period of time required to envelop them to the depth of sixty feet.¹¹⁰

Nearly forty years later, the process described by MacKinnon inspired the development of a new science: ecology. Historian of ecology Sharon E. Kingsland traces the roots of modern American ecological science to the work of three midwesterners: Stephen Alfred Forbes (1844-1930), Henry Chandler Cowles (1869-1939), and Frederic Edward Clements (1874-1945). In America, the birth of self-conscious ecology was signaled by formal consideration of the discipline at the Madison Botanical Congress of 1893, and the completion of dissertations by both Cowles and Clements in 1898. America's pioneer ecologists drew inspiration from European botanists and geographers, and adapted their ideas to the study of vegetation patterns in the dunes, prairies, and forests of the Midwest.

In 1866, German botanist Ernst Haeckel defined "oecologie" as "the science of the relations of living organisms to the external world, their habitat, customs, energies, parasites, etc." Despite the definition and name provided by Haeckel, ecology did not take form as a science until the end of the century. In Europe, the work of plant geographers Oscar Drude, Andreas Schimper, and Eugenius Warming transformed ecology into an operative science during the late nineteenth century. Foremost among these early ecological pioneers, in environmental historian Donald Worster's

Lauchlan Bellingham McKinnon,
Atlantic and Transatlantic Sketches, Afloat
and Ashore (London: Colburn, 1852),
118; quoted in Marion Morse Davis,
"A Romantic Chain of Islands,"
Michigan History 11(3): 348 (1927).

Papers: Defining Ecology as a Science," in Leslie A. Real and James H. Brown, eds., Foundations of Ecology: Classic Papers with Commentaries (Chicago & London: University of Chicago Press in association with the Ecological Society of America 1991), 2.

¹¹² Robert P. McIntosh, *The Background* of Ecology Concept and Theory (Cambridge, England: Cambridge University Press, 1985).

113 Ernst Haeckel, The Wonders of Life: A Popular Study of Biological Philosophy.

Trans. Joseph McCabe. (New York, London: Harper & Brothers, 1905), 80; quoted in Donald Worster, Nature's Economy: A History of Ecological Ideas (Cambridge: Cambridge University Press, 1977), 192.

estimation, was Danish plant geographer Eugenius Warming. In 1895, Warming published *The Oecology of Plants: An Introduction to the Study of Plant Communities.* The central theme of Warming's book was the communal life of organisms. He emphasized the "community," or natural assemblage, and symbiotic relations among plants. Warming also proposed a system for classifying major plant formations and suggested processes of ecological succession or dynamics. Warming's book was revised and translated into English in 1909. Even before its translation, however, Warming's example was influencing the work of early ecologists in Britain and the United States.¹¹⁴

Inspired by the ecological investigations of European plant geographers like Warming, American ecologists Henry C. Cowles and Frederic Clements formulated a dynamic model of plant ecology. Working in the mid-1890s, Cowles applied Warming's model of succession to vegetation on Lake Michigan's shores. Trained as a geologist, Cowles studied the "succession" of plant communities as they moved inland across the dunes along the southeastern shores of Lake Michigan. The changes that Cowles observed along an environmental gradient extending from sand beach to wooded dune suggested that vegetation patterns changed both spatially and temporally in response to geological interactions. 115

From 1896 through 1898 Cowles collected data on the relationships between plants and dune formations in northern Indiana. During 1897 and 1898 he spent a portion of the summer seasons in "a more rapid reconnaissance along the entire eastern shore of Lake Michigan, including the group of islands toward the north end of the lake." A biography of Cowles' mentor at the University of Chicago, John Merle Coulter, notes that "in 1898 Cowles had a class of twelve students in northern Michigan—North Manitou Island, particularly." Cowles and his students evidently spent a significant amount of time on North Manitou Island, perhaps finding accommodations in the hotel operated by the Newhalls or in one of the Cottage Row summer houses. During his stay, Cowles noted that:

On North Manitou there are prominent areas of dune activity along the southwest coast, the dunes being superposed on bluffs of clay or gravel. There is a flat-topped terrace here, like that at Glen Haven, but in miniature, the height being only 15 meters, the greatest altitude being 45 meters above the lake. There are also small wandering dunes superposed directly upon the beach. On the west coast the bluffs are steeper and much higher, at times perhaps 60 meters above the lake; the summits are occasionally crowned by established dunes.¹¹⁸

On North Manitou Island and elsewhere along the Lake Michigan coastline, Cowles described a series of dune formations, beginning with beach, then stationary beach dunes, active or wandering dunes, arrested or transitional dunes, passive or established dunes,

¹¹⁴ Worster, Nature's Economy, 202.

¹¹⁵ Henry Chandler Cowles, "The Physiographic Ecology of Chicago and Vicinity," *The Botanical Gazette* 31(3):145-182 (1901).

¹¹⁶ Henry C. Cowles, "The Ecological Relations of the Vegetation on the Sand Dunes of Lake Michigan." *Botanical Gazette* 27:97 (1899).

¹¹⁷ Andrew Denny Rogers III, John Merle Coulter: Missionary in Science (Princeton, N.J.: Princeton University Press, 1944), 178.

¹¹⁸ Cowles, "Ecological Relations," 106.

THE ECOLOGICAL RELATIONS OF THE VEGETATION ON THE SAND DUNES OF LAKE MICHIGAN.

PART I—GEOGRAPHICAL RELATIONS OF THE DUNC FLORAS.

CONTRIBUTIONS FROM THE HALL BOTANICAL LARGEATORY XHI

HENRY CHAPPIER COWERS (WITH FIGURES 1-26)

I. Introduction.

THE province of ecology is to consider the mutual relations between plants and their environment. Such a study is to structural botany what dynamical geology is to structural geology. Just as modern geologists interpret the structure of the rocks by seeking to fine how and under what conditions similar rocks are formed today, so ecologists seek to study those plant structures which are changing at the present time, and thus to throw light on the origin of plant structures themselves.

Again, evology is comparable to physiography. The seriace of the earth is composed of a myriad of topographic forms, not at all distinct, but passing into one another by a series of almost perfect gradations; the physiographer studies landscapes in their making, and writes on the origin and relationships of topographic forms. The evologist employs the methods of physiography, regarding the flora of a pond or swamp or bilishte not as a changeless landscape feature, but rather as a panorama, never twice alike. The evologist, then, must study the order of succession of the plant socreties in the development of a region, and he must endeaver to discover the laws which govern the panoramic changes. Evology, therefore, is a study in dynamics. For its most ready application, plants should be found whose tissues and organs are actually changing at the present time in

Figure 2.14. Historians of ecology consider Henry C. Cowles' study of plant succession in Lake Michigan dune landscapes, which was published in 1898 and 1899, to be a "foundational" paper in the development of American ecological science.

and deciduous mesophytic forest. Cowles focused on the physical characteristics shaping the "seres," or identifiable stages of succession. From his data, Cowles constructed a theory that related the spatial sequences of plants on the dunes with the temporal development of plant associations. His 1899 paper presented an explanatory theory for "the order of succession of the plant societies in the development of a region."

Cowles' study of Lake Michigan dunes was one of the first major ecological investigations in the United States to focus on the spatial sequences and temporal development of plant associations. The journal *Botanical Gazette* published his research as a series of articles in 1899 under the title, "The Ecological Relations of the Vegetation on the Sand Dunes of Lake Michigan" (figure 2.14). In his paper, Cowles described an order of dune formations, beginning with the beach, then stationary beach dunes, active or wandering dunes, arrested or transitional dunes, passive or established dunes, and finally,

¹¹⁹ Ibid., 95.

¹²⁰ Kingsland, "Foundational Papers,"

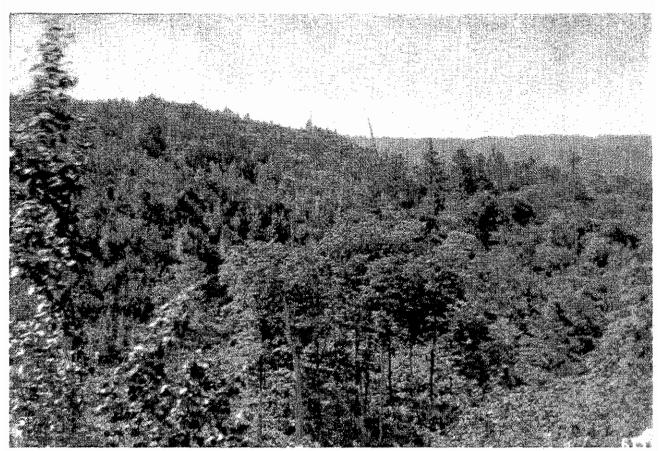


Figure 2.15. In addition to dunes, early students of ecology studied North Manitou Island's forest communities. This landscape view of the island may have been taken during the first decade of the twentieth century by a representative of the U.S. Forest Service.

deciduous mesophytic forest.¹²¹ He expanded upon theories of plant ecology and succession in "The Physiographic Ecology of Chicago and Vicinity: A Study of the Origin, Development, and Classification of Plant Societies," which was published in the *Botanical Gazette* in 1901.

Following Cowles, other early ecologists studied North Manitou Island's plant communities. Photographs in the Chicago Maritime Society's John Newhall Collection suggest that the U.S. Forest Service also may have surveyed the island's forests during the first decade of the twentieth century (figure 2.15). Harry Nichols Whitford, a student of Cowles, investigated the island's woodlands as part of an effort to describe the "physiographic ecology" of northern forest communities. Whitford regarded North Manitou as one of four sites in northern Michigan that offered "exceptionally good fields for a study of the stages in the life history of the forest societies." Of the island landscape, Whitford wrote:

The whole interior of North Manitou Island ... except in clearings and undrained areas, is covered with a mature maple-beech-hemlock forest. The presence of seedlings and young trees of these three in abundance and the absence of all other young trees in their shade indicate that the future forest growth will be the same as the present. The climax forest in places reaches nearly to the shore of Lake Michigan, restricting the coniferous and heath societies to very narrow belts. If the present shore

of the Fotests," 295-296.

¹²¹ Cowles, "Ecological Relations," 112.

<sup>Brian T. Hazlett, "The Flora of Sleeping Bear Dunes," 140-142.
Whitford, "Genetic Development</sup>

line should remain constant, and if the natural succession of plant societies were not interfered with by man, undoubtedly the whole island would in time become completely covered with a deciduous forest save a narrow strip, the last remnants of a coniferous forest, next the water's edge."¹²⁴

Whitford's study was published in the Botanical Gazette 1901. Three years later another student of ecology published a study based, in part, on data collected from North Manitou Island. Samuel Monds Coulter gathered data from Tamarack Lake and Lake Manitou for an ecological study of wetlands that was presented to the faculty of Washington University, St. Louis, as a Ph.D. thesis in 1903, and published by the Missouri Botanical Garden in 1904. Coulter considered Tamarack Lake to be a prime example of "the undrained tamarack and black spruce swamp.... a small decadent lake without an outlet which is gradually being filled up by the encroaching vegetation." ¹²⁵ Coulter categorized the wetland at the northeastern end of Lake Manitou as a "slowly drained swamp," and described the area as a "great tract of trees and undergrowth amid a mass of fallen logs and brush [that] forms a dense jungle of vegetation which is almost impenetrable."126 Several years later, Robert T. Hatt and other wildlife ecologists included North Manitou in their study of island fauna in the Great Lakes region. 127

The dunes, forests, and wetlands of North Manitou thus contributed to the development of a distinct, twentieth-century environmental science that much later would deeply influence the ways in which humans perceived and interacted with the island landscape. Men like Cowles, Whitford, and Coulter expressed a view of the non-human natural world—an explanation of how nature works—that was fundamentally different from the Arcadian or utilitarian attitudes of the previous century. For example, in discussing the evolution of forest communities, Whitford gave special attention to the stages of succession in forests that had fallen under "the influence of human agencies," including in his research clearings that showed "unmistakable signs of the devastating influence of man."128 Whitford noted that North Manitou's forests had "attained the last stage in the life-history" (i.e., climax forest), partly because they had been relatively "free from the influence of man." 129 His comments foreshadowed the managerial focus that later would permeate much ecological research, and profoundly alter the North Manitou landscape.

Corporate Farming

During 1897-1899, around the time that Cowles' ground-breaking research was published, Silas Boardman sold his North Manitou Island property to Franklin Newhall and his son, Benjamin. Shirley Foote Alford alleged that Boardman's stock farm was a financial failure because "shipping ... stock was only possible in favorable

- 124 Ibid., 302
- ¹²⁵ Coulter, "Ecological Comparison," 42.
- 126 Ibid., 48.
- 127 Robert T. Hatt, J. Van Tyne, L. C. Stuart, C. H. Pope, and A. B. Grobman, Island Life: A Study of the Land Vertebrates of the Islands of Eastern Lake Michigan (Bloomfield Hills, Mich.: Cranbrook Institute of Science, 1948). Although published in the late 1940s, Hatt carried out field investigations on the island during 1916.
- ¹²⁸ Whitford, "Genetic Development of the Forests," 323.
- 129 Ibid., 316.
- 130 The earliest photographs of North Manitou in the albums of John Newhall, which belong to the Chicago Maritime Society, appear to date from 1897, suggesting that the Newhall's tenure began within, or shortly after, that year. This is consistent with other accounts, which suggest that the Newhalls arrived in 1898 or 1899.

North Manitou Island as a Summer Resort

The following text is taken from a small promotional booklet printed ca. 1908. The Newhalls probably circulated the booklet among friends, business associates, and acquaintances. The playful, sometimes sardonic, prose of this "advertisement" suggests the extent to which the Newhalls regarded the island as a landscape for casual recreation and light-hearted revelry among friends.

TO FORMER VISITORS:

Same old thing as last year—same boats, same old horses and carriages. Same fare (probably) (same dinner bell anyway)—same old dock—same cherry orchard—same Streamer Missouri—same welcome to yourself and friends.

TO THOSE WHO HAVE NOT VISITED THE PLACE:

There is an Island up in Lake Michigan where a few nice people go every summer, that may appeal to you as a place to spend a vacation.

It's up near Traverse City; is a quiet place, no crowds, no hotel, and almost no modern improvements. There is but one steamer per week, each way, stopping at the Island regularly—a good one.

There is a daily U.S. mail boat, but she is not large enough to be objectionable.

As to the Island itself.

There are many things wanting, which may be found at most summer places, and which many people might expect—and might want—no boulevards, no merry-go-rounds, no automobiles, not even a golf course worthy the name.

The Island itself is not very long, nor broad, only a few thousand acres of woods, and a lake in the middle of it, where they claim Bass are caught, but you cannot prove that by the writer: of course he has heard the usual fish stories about 7½ pound small-mouthed Bass, etc., but he don't believe many of them. Probably some are true:

weather." Alford noted that by 1893, Boardman "was still doing a little farming, and cattle and 'wild' horses were running freely over the Island roads and through the woods." Only a few years after establishing the Cottage Row summer colony, Boardman began selling his North Manitou property to Franklin Newhall and his son, Benjamin. A resident of Glencoe, Illinois, Franklin Newhall owned a successful wholesale fruit business in Chicago, and may have had a financial tie to Boardman's North Manitou venture. 132

Photographs in the archive of the Chicago Maritime Museum suggest that the Newhalls had established a significant presence on the island by 1897. The Newhalls probably acquired their North Manitou Island property with the intent of engaging in commercial fruit production. In January 1899 they acquired all of Frederic Beuham's island property, totaling nearly 923 acres. The Newhalls acquired the acreage from the three Stark brothers and their wives, suggesting that Beuham had defaulted on his agreement with the Stark Bros. Nursery Co. 133 Since Boardman and Beuham

¹³¹ Alford, untitled manuscript.

¹³² Hollister, "Summer Resort"; Rusco, North Manitou Island, 53-55.

There are numerous carriage roads—paved neither with asphalt nor macadam, but are of earth and forest leaves. These have their advantages—and disadvantages.

The Island is not entirely wild—a farm house, dining hall, and a few summer cottages, which the guests seldom use, except to sleep in. If these cottages could have been made any more simple than they are, the people who built them do not know how. Then there are the Government Life Saving Station buildings, the light house, and the three or four farm houses of the native Islanders.

There are also a few orchards—apple, cherry, etc., which have borne fruit—at times:

There is usually enough to eat, such as it is, mostly things raised on the Island.

The cooking is often good, not always, but the guests who have been there do not complain—they probably think it isn't good policy in such a place. Prices for board are not high, but high enough perhaps for what is furnished.

If you are hardy enough after reading all this to think of a visit to the place, write to John Newhall on the Island for further details, and he will be glad to tell you more of its advantages and disadvantages.

You might write or see some of those who have been there, and they also may be inclined to talk about the place. If you do this, be sure to ask them about the Island livery. They love to talk about that—It's unique—nothing like it in Michigan.

If in a hurry, you would better write or call up F. Newhall & Sons on South Water Street, and then after making due allowances for the said firm's personal interest in the Island, make up your minds whether or not you should go. It is easy to reach, but sometimes not so easy to leave.

The post office address at the Island is

NORTH MANITOU ISLAND, MICHIGAN

Source: Typed manuscript compiled by Josephine Hollister. Betty Kramer Collection. Leelanau County Historical Museum, Leland, Mich.

appear to have been in partnership, it is reasonable to suppose that their financial fates were linked as well.

The Newhalls quickly expanded their island land holdings. In 1900 they purchased all of Section 16, T31N, R14W—a total of 640 acres. A 1900 atlas of Leelanau county showed Franklin and Benjamin Newhall to be the largest land owners on the island, controlling more than 8,350 acres, or more than half of the island's land area. Another large owner, Gottlieb Patek, owned nearly 4,000 acres. The remainder of the island was divided among only about a dozen smaller land owners, most of whom owned acreage clustered near the southern end of the island. During the first decade of the 1900s, Benjamin Newhall bought out several of the remaining independent farmers, including long-time island residents Nels and Sophia Carlson. Benjamin's brother, John, managed the family's North Manitou operation, and himself purchased tracts of island land totaling nearly 100 acres between 1907 and 1908. 135

¹³³ Leelanau Deeds, Liber 24, 318.

¹³⁴ Fritz, "History Data Report," 56, 12-13.

¹³⁵ Fritz, "History Data Report," 58.

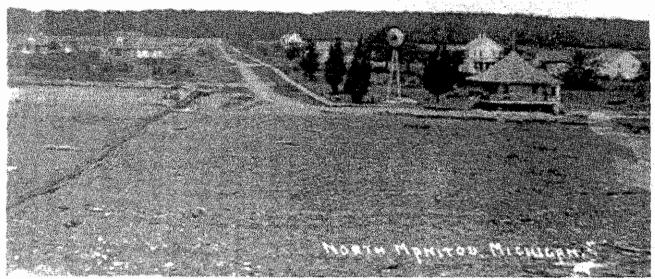


Figure 2.16. Road leading from the North Manitou Village dock, ca. 1900. The buildings occupying the distant right side of this view were built by Silas Boardman, and served as the base of the Newhall family's North Manitou farming operation. The post office and store built by the Newhalls is situated in the right foreground.

The Newhall family increased the amount of acreage devoted to fruit cultivation on North Manitou Island. In addition to cultivating apples, pears, plums and apricots, the Newhalls planted three tart cherry orchards and two sweet cherries orchards on the island. 136 They also continued to promote the island as a resort. Shirley Foote Alford, who was a member of one of the original Cottage Row families, recalled that after the Newhalls purchased Boardman's island properties, "many Glencoe and North Shore people spent summers at the Island. There were often forty or fifty people in the dining room—many young people of college age or younger. Parties, picnics, plays, hay-rides—such a gay and happy place." The Newhalls apparently assumed operation of the Cottage Row dining hall and hotel, offering paying guests either room and board, or the use of fully furnished cottages. 138 For their own use, the Newhalls constructed two frame cottages north of the road leading westerly from the village dock into the woods. Near the dock, they built a small store and post office building with an exotic, "pagoda" style roof (figure 2.16).

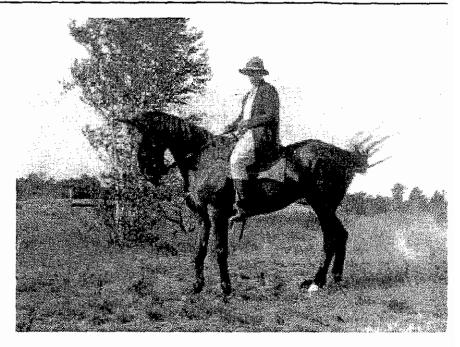
During the early 1900s, North Manitou increasingly became a summer resort for wealthy Chicago families. In 1903, Alvar and Mary Bournique, a Chicago family with connections to the Cottage Row summer colony, began developing their own private retreat at the southeastern tip of the island. Alvar Bournique filed a homestead application for 152.20 acres in Section 22, T31N R14W, not

¹³⁶ Rusco, North Manitou Island, 57.

¹³⁷ Alford, untitled manuscript.

¹³⁸ Hollister, "Summer Resort"; Rusco, *North Manitou Island*, 58.

Figure 2.17. Mary McMunn Bournique on "Old Sparkie." The Bournique family used their homestead near the southeastern end of the island as a summer residence where they enjoyed horseback riding, picnics on the beach, and other leisure-time activities.



far from where Nicholas Pickard had established his first wooding station a half century earlier. The Bourniques later increased the size of their parcel to approximately 400 acres. On their North Manitou property they constructed a large, rustic log cottage facing Lake Michigan, and a number of smaller outbuildings. Further inland, the Bourniques developed fields and pastures, and built a barn and other farm buildings to house thoroughbred riding horses (figure 2.17). A professional dance instructor, Colonel Bournique used the upper portion of his horse barn as a ballroom. 140

Return of the Lumberman's Ax and Saw

The Newhalls' diversified business enterprise and the Bournique horse ranch represented the coincidence of two well-established activities on North Manitou Island-agriculture and recreation. However, the most significant industry on North Manitou Island during the early 1900s was neither farming, nor resort tourism, but the revival of extensive timber extraction. In his 1901 paper, botanist Harry Nichols Whitford described the hardwood forest of North Manitou Island as "an ideal example of a climax forest of maple, beech, hemlock, which in time would cover the entire island except for a narrow fringe of conifers near the lakeshore."141 Although much of island was second-growth forestland, the timber evidently was mature enough to garner the interest of lumbermen shortly after Whitford recorded his observations. In November 1906 the Smith & Hull Lumber Company of Traverse City, Michigan, purchased over 4,000 acres of timbered land on the western side of the island from Gottlieb Patek of Milwaukee.

Because it was relatively far from the former west-side dock location at Aylsworth, and because it would have been utilized late in the cordwood era, much of the Smith & Hull acquisition may have been spared the intensive timber harvesting that occurred on other

¹³⁹ Homestead Application #11080, Serial #022; Final Certificate (Patent) #62772, National Archives and Records Administration, Washington, D.C.

¹⁴⁰ Rusco, North Manitou Island, 59.

Vegetation, 44. Since much of North Manitou had been logged during the previous fifty years, Whitford may have focused his studies on portions of the island that, due to rugged terrain and remote location, had remained virtually untouched by cordwood choppers. Such virgin stands may have existed in the northwestern portion of the island, in the vicinity of the Pot Holes.

Figure 2.18. Crescent, North Manitou Island, ca. 1908. The short-lived community of Crescent developed on the western side of the island around an extensive dock and wharf built by the Smith & Hull Lumber Company, and a steam-powered lumber mill operated by A. J. White & Son. The "company town" flourished during 1908-1915, but thereafter vanished from the island landscape almost as quickly as it had appeared.

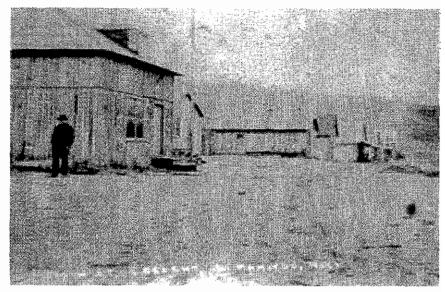




Figure 2.19. Smith & Hull narrow-gauge railroad, near Crescent. A 28-ton Shea steam engine hauled timber along a six-milerail spur which extended from the interior of the island to the lumber mill and dock at Crescent.

parts of the island during the 1800s. Shirley Foote Alford recalled that the area around Lake Manitou was heavily wooded during the late 1890s:

... the island itself looked much as it does today [ca. 1920s], except that west of the Little Lake a good deal of the forest had never been cut. The trees were immense, and white violets bloomed all summer in the dense woods. North and west of the Little Lake was a thick cedar swamp, and the shores of the lake were so thickly wooded that it was very difficult to walk around them. There was no road around the lake.¹⁴²

Smith & Hull centered their operation near the former location of Aylsworth in Section 1, T31N R15W. They completed the construction of a six-hundred-foot dock in 1908. At the dock location, known as "Crescent," they developed a new pier and wharf, storage yards, and housing for workers (figure 2.18). The community had a hotel and a general store, as well as a saloon, and a schoolhouse that also functioned as a church on Sundays. A large sawmill, which also generated electricity for the settlement, was constructed and operated by A. J. White and Son. In addition to this infrastructure, the lumber company provided a physician, Dr. Frederick Murphy, who rendered medical services to all islanders, not just Crescent residents.

The Crescent post office opened on 21 September 1908. The following spring, Smith & Hull constructed a six-mile narrow-gauge railroad in the northwestern corner of the island to facilitate the transportation of timber to the dock (figure 2.19). The system was equipped with a 28-ton Shea engine and twelve Russell logging cars. In 1909 Smith & Hull began removing hemlock trees from the island's west side. Over a period of six years, the firm anticipated harvesting 40,000 board feet of lumber per day during the cutting season. Due to the influx of lumber and mill workers, North Manitou Island's population had increased to 215 people when the

¹⁴² Alford, untitled manuscript.

¹⁴³ Fritz, "History Data Report," 14-15; Rusco, North Manitou Island, 97, 102.

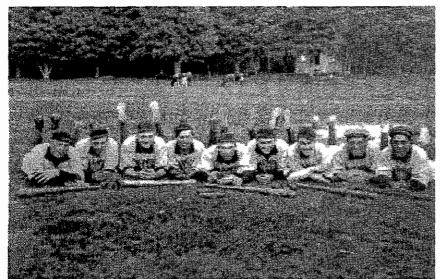


Figure 2.20. North Manitou Island mens' baseball team, Crescent, ca. 1908-1915. During the early 1910s Crescent had an ethnically diverse population of several hundred men, and a substantially smaller number of women and children. The community supported at least two baseball teams, one of which was composed of American Indians whom had left their homes on the mainland to work in the island lumber camps. Opposing teams traveled from the mainland to play games on the island. These may have occurred in the large fields and pastures of the company-operated farm, which surrounded the community.

federal census taker visited the island on May 13, 1910 (figure 2.20).¹⁴⁴ Only a few weeks later the island's population nearly doubled when the company brought a crew of Russian immigrants to work in the logging camps.¹⁴⁵

Shortly after construction of the Crescent lumber camp, the Newhalls also began selective timber cutting on their North Manitou property. Around 1908, Peter Stormer entered an agreement to supply Wilce Brothers Lumber Company of Empire with timber from the island. Shortly thereafter, Benjamin Newhall contracted with Stormer to remove timber from lands on the eastern side of the island (figure 2.21). 146 Stormer and his family took up residence at the former Lats Christian Alstrom farmstead at the southern end of the island. The farm provided meat and dairy products for the men, and hay for the draft animals in Stormer's lumber camps, which were positioned at various locations at both the northern and southern ends of the island. In 1917, Stormer expanded his island timber enterprise by constructing a sawmill and dock near the former location of Nicholas Pickard's first wooding station dock at the southeastern tip of the island. 147 At about the same time, logging activity on the western side of the island had mostly ended. Smith & Hull had substantially depleted the supply of harvestable timber in the northwestern portion of the island by the end of 1914. The A. J. White & Son mill operated through the spring of 1915, while the surrounding lumber camp was dismantled. The last pieces of machinery left the island in July 5, 1915; less than two months later, on August 31, 1915, the Crescent post office closed.148.

The character of the Newhalls' business enterprise on North Manitou Island clearly changed during the late 1910s. Perhaps because they wished to devote more resources to the fruit or logging operations, or due to other pecuniary or administrative reasons, the Newhalls "suspended" their island resort business. They closed the Cottage Row dining room sometime in 1910 or 1911, presumably so

¹⁴⁴ U.S. Census Office, "Thirteenth [1910] Census of the United States— Population," microfilm copy of manuscript schedules, Library of Michigan, Lansing.

¹⁴⁵ Rusco, North Manitou Island, 101-102.

¹⁴⁶ Fritz, "History Data Report," 86; Rusco, North Manitou Island, 52; Hollister, "Summer Resort."

147 Oddly, Fritz (17-18) states that Peter Stormer stopped cutting timber on the island around the time when his Empire mill burned in 1916, and implies that Stormer's mill operated concurrently with the one at Crescent. He claims that Stormer sold his 24-acre parcel on North Manitou (Section 21, T31N R14W) to Sherman and McConnel in 1923. See Fritz, "History Data Report," 87, 17-18.

¹⁴⁸ Rusco, North Manitou Island, 102-103. According to Fritz, Smith & Hull continued logging operations until 1917. See Fritz, "History Data Report," 17-18.

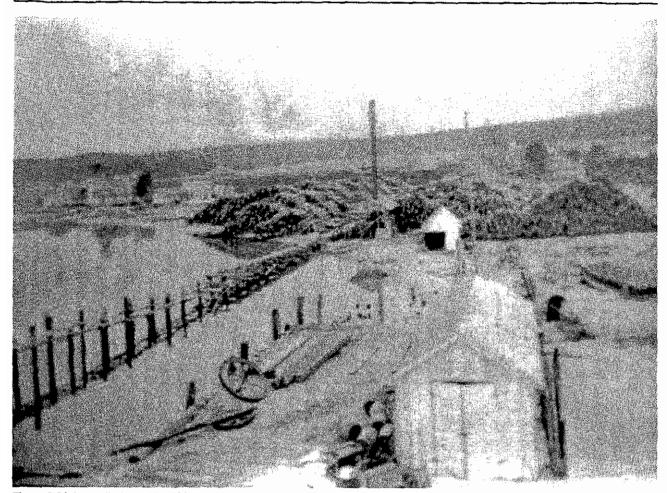


Figure 2.21. Logs piled near North Manitou Village dock, ca. 1910s. Concurrent with the Smith & Huil logging activities on the western side of the island, the Newhall family began harvesting timber from their lands on the eastern side of the island. During the early 1910s Peter Stormer shipped lumber from the Newhalls' dock at North Manitou Village.

the facility could be used by timber cutting crews.¹⁴⁹ Following closure of the dining room, Katie Shepard began serving meals to cottage dwellers in a dining hall located behind her house. Shepard also began renting rooms in her home to guests, effectively converting her cottage into a small summer hotel.

The Manitou Island Syndicate

Financial difficulties may have prompted the Newhalls to discontinue their North Manitou Island resort business. According to Josephine Hollister, during the early 1920s, Benjamin Newhall lost his family's island land holdings to a group of Chicago businessmen who held his mortgage. 150 These men became associated in a nominal partnership known as the "Manitou Island Syndicate" (MIS). With little documentary evidence remaining extant, the origins, early composition, and purpose of the MIS remain somewhat obscure. Fritz implies that the MIS evolved out of the Cottage Row resort development, and states that "at various times there were as many as a dozen members of the Syndicate, with the large landowners functioning as the moving force behind the organization. Through a general manager the Syndicate engaged in general farming together with cattle raising, and grew oats, rye, wheat, and other forms of fodder for the cattle." Fritz states that the syndicate's agricultural activities supported the Crescent logging venture during 1909-1917,

¹⁴⁹ Alford, untitled manuscript.

¹⁵⁰ Hollister, "Summer Resort"; Fritz, "History Data Report," 76, quoting a letter from Josephine Hollister dated 15 January 1986.

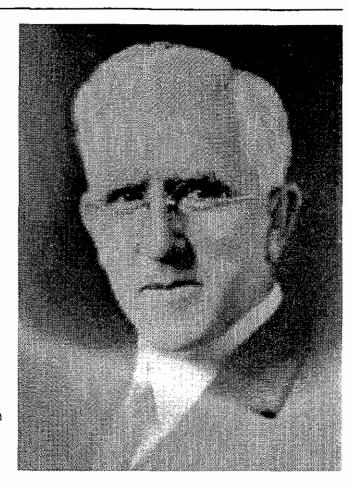


Figure 2.22. William R. Angell was an executive officer of the Detroit-based Continental Motors Corporation from 1917 through 1939, and served as the corporation's treasurer and president from 1930 through 1939. He began purchasing property on North Manitou Island in 1926. Through subsequent acquisitions Angell quickly gained a controlling interest in the Manitou Island Association.

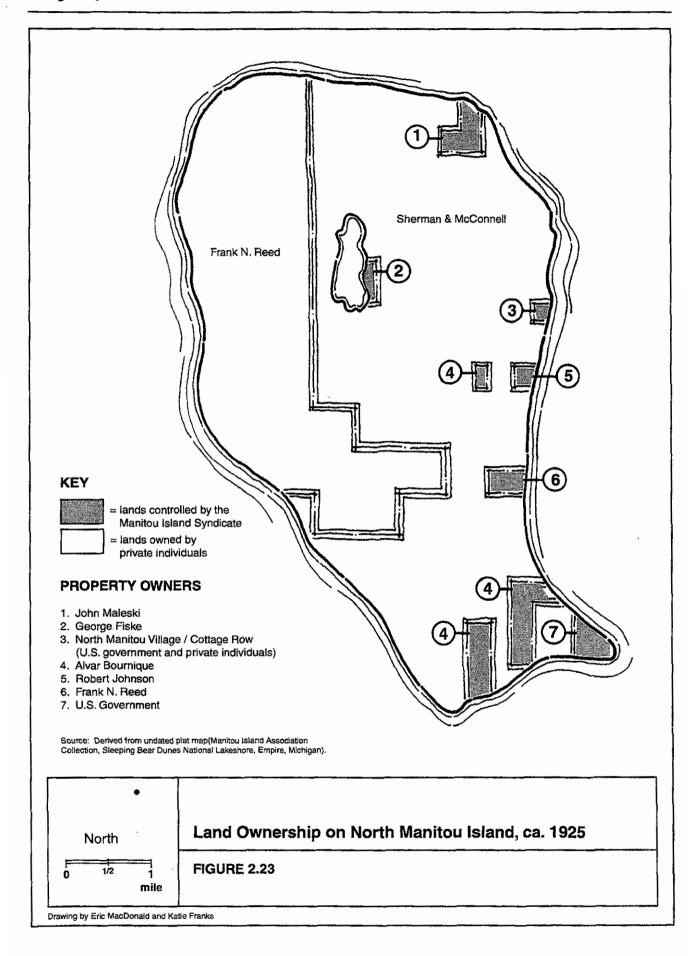
and that the group afterwards "continued its farming, mainly to sustain the summer resort dwellers ..." If this scenario is accurate, the Newhalls initially must have been affiliated with the syndicate, since they owned most of the island's agricultural land, and also controlled the Cottage Row dining and hotel facility during this time.

During the early 1920s the group of "large landowners" who controlled the syndicate probably included Frank N. Reed of Evanston, Illinois, and Roger Sherman and George M. McConnell of Chicago. Through a contract dated 15 June 1922, Reed gained control of the Smith & Hull Lumber Company's North Manitou Island lands. 152 Josephine Hollister recalled that the Cottage Row summer home originally owned by George and Carrie Blossom became the "Reed cottage when the Syndicate took over the island."153 Reed began selling small parcels to the partnership of Sherman and McConnell in 1923, which had begun buying land on the island during the previous year. Probably around this time Reed, McConnell, and Sherman reorganized the syndicate's island business operations into a quasi-corporate entity known as the "Manitou Island Association." By 1925, Sherman and McConnell owned 7,911 acres, or fifty-six per cent of the island, while Reed owned 5,182 acres, most of which were located on the western side (figure 2.23). During the following year Reed sold all of his Smith & Hull

¹⁵¹ Fritz, "History Data Report," 71. Fritz's sources were interviews with Paul Maleski, letters from Giles Merritt, and NPS land acquisition files. The connection between the syndicate and the Cottage Row resort development is implied by an entry in Leelanau County Deeds, Liber 55, p. 365, which refers to "10 syndicate lots heretofore sold."

¹⁵² Leelanau Deeds, Liber 55, 365.

¹⁵³ Hollister, "Summer Resort."



lands to Sherman and McConnell, and a new investor, William R. Angell, began purchasing property on the island (figure 2.22). 154

William Angell probably was introduced to North Manitou Island and the Manitou Island Syndicate through his friend and business associate Roger Sherman. 155 A prominent Chicago attorney, Sherman was one of the original investors in the Autocar Equipment Company, a corporation that by the mid-1920s had evolved into Continental Motors Company, one of the largest manufacturers of automobile engines in the U.S. Organized in Chicago in 1902, the company constructed a large factory in Muskegon, Michigan, in 1906. By 1910 approximately half of the automobiles produced in the United States used Continental motors, including those of such major manufacturers as Auburn, Hudson, Paige-Detroit, and Studebaker. In 1912 the company opened a huge new factory in Detroit, and moved its administrative headquarters there. As one of the initial investors in Continental Motors, Roger Sherman realized a substantial financial benefit from the company's success. An original investment of only one hundred dollars was worth \$28,000 dollars in 1928. During the 1920s and 1930s, Sherman served on the company's board of directors, and was vice-president of its automobile subsidiary during the mid-1930s. 156

Sherman and William Angell worked closely with one another during the late 1920s and 1930s. Born in 1877 in Jesup, Iowa, and raised in Muskegon, Michigan, William Angell graduated from Kent College of Law and became a corporate attorney in Chicago. 157 Angell's association with Continental Motors began in 1916 when he helped the company's founders to reorganize and refinance the corporation. In 1917 he became corporate secretary, and thereafter his management roles steadily increased. In 1921 he became vicepresident of the company.¹⁵⁸ Rusco states that Angell visited North Manitou Island during the early 1920s as a guest of Roger Sherman. 159 In 1926, Angell began purchasing land on North Manitou Island under the aegis of the "Security Trust Company." Most of McConnell and Sherman's North Manitou land was transferred to Angell's Security Trust Company via an agreement dated 1 March 1926.¹⁶⁰ Angell acquired Frank Reed's island property directly from Smith & Hull for one hundred dollars, and in 1928 he purchased several small parcels from Newhall family heirs. Within a period of less than three years, only the portions of the island that remained outside his possession were the Maleski lands at the northeastern end of the island, a parcel owned by George Fiske on the eastern side of Lake Manitou, the Bournique properties at the southeastern end, and several small lots in the village and along the eastern shore. 161

William Angell and the Manitou Island Association

The shift in power within the Manitou Island Syndicate and its business adjunct, the Manitou Island Association, was reflected in a trust agreement created on 1 March 1928. According to the agree-

¹⁵⁴ Leelanau Deeds, Liber 55, 365; Fritz, "History Data Report," 18.

¹⁵⁵ Rusco, North Manitou Island, 9.

Motors and Its People (Fallbrook, Calif.: Armed Forces Journal International; Aero Publishers, 1983), 70, 5-10, 16-17, 38.

¹⁵⁷ Rusco, North Manitou Island, 9.

¹⁵⁸ Wagner, Continental!, 23, 27-28.

¹⁵⁹ Rusco, North Manitou Island, 9.

¹⁶⁰ Leelanau Deeds, Liber 55, 365-369. This transaction probably is the agreement referenced on p. 19 of David Fritz's "History Data Report." Fritz notes that the lands were transferred in exchange for "one dollar and other valuable considerations," and that the agreement was recorded in Leelanau County Deeds on 14 November 1927.

¹⁶¹ Fritz, "History Data Report," 19.

Figure 2.24. Women sorting cherries, North Manitou Island, ca. 1910s. The isolated North Manitou economy provided women with few opportunities to earn cash income. Women and children found wage work performing domestic chores for the Manitou Island Association, and for Cottage Row residents and their guests. A few agriculture-related chores also were available to women and children. Most of these jobs were seasonal, such as harvesting, sorting, and packing fruit for the Newhalls and, later, the Manitou Island Association.



ment, George M. McConnell, John McConnell, Allen A. Murray, Roger Sherman, and William R. Angell each were entitled to one fifth of the proceeds of North Manitou Island real estate, which was owned by the Security Trust Company. The agreement stipulated that the names of the trust beneficiaries were not to be released to the public, and that inquiries were to be referred to Allen Murray. 162 During the 1920s and 1930s the Manitou Island Association probably was a nominal partnership of these five men. The organization's dayto-day operations were administered by a paid manager who resided on the island. According to Josephine Hollister, there were rumors that the investors planned to develop the western side of the island as a hotel and golf course. 163 If true, this resort development never materialized, however; the Manitou Island Association appears to have carried on a diversified operation during the 1920s, engaging in traditional island activities such as fruit farming, logging, commercial fishing, and supplying ice, wood, dairy products, and fresh vegetables to the local Coast Guard families and summer cottage owners.

By the mid-1920s the MIA not only controlled most of North Manitou Island's land, but also the island's economic and social life. The Maleski family was the sole remaining independent farm family, and the island's only other significant employer was the U.S. government, which hired men to maintain the island coast guard station and the lighthouse at the southeastern end of the island. In addition to a salaried manager, the MIA employed a core workforce of approximately ten men during 1925-1929. Other laborers were hired during the summer and autumn months, especially during the cherry and apple harvests.¹⁶⁴

For the female and adolescent members of several North Manitou families, the MIA represented a significant market for labor

¹⁶² Trust Agreement, 1 March 1928, Arthur Jay Lacy Papers, Bentley Historical Library, Ann Arbor, Mich.

163 Hollister, "Summer Resort."

Manitou Island Association
Accounts Journal, September 1924 December 1929, MIA Collection,
Sleeping Bear Dunes National
Lakeshore, Empire, Mich. For a
complete list of the names that
appeared on the Manitou Island
Association payroll during the years
1925-1929, see Appendix F.

in a local economy where opportunities for earning cash income were limited (figure 2.24). The wives of MIA employees Henry and John Anderson were paid for "boarding men" at their homes in the southern portion of the island during haying season, and other island women were paid for cleaning, washing, and other household chores at the MIA farmhouse and lodge. Katie Shepard also provided employment to young women at her hotel and dining room. Nonetheless, non-wage, subsistence labor occupied the majority of the island's women and children during this period.

By and large, wage work, such as that described above, supplemented traditional subsistence activities. Many island families maintained small garden plots during the summer months, and a few kept a couple of dairy cattle, thereby retaining a minimal degree of self-sufficiency. Glen Furst reminisced that the black raspberries that flourished in the sunlit openings of the island's woodlands were a significant source of food for islanders during the 1920s. Even after Furst's stepfather moved the family to South Manitou Island, he continued to take a few days off each summer to harvest berries on North Manitou Island. 165 Giles Merritt reminisced that the island had "acres of wild black berries," and that island residents "canned them by the bushel."166 Merritt also recalled that members of the coast guard crew supplemented their diets by hunting rabbits and ducks, and by fishing on Lake Manitou during their free time. Other residents, including the Maleskis and Glen Furst's stepfather, gained additional income from trapping foxes and selling their pelts. 167 These exceptions aside, the principal source of cash income on the island was the multi-faceted business enterprise of the Manitou Island Association, which also controlled the flow of consumer goods onto the island through a company store that opened in 1925.

According to Rita Hadra Rusco, the MIA's business dealings were largely managed by member Jack McConnell, who occupied the former Boardman and Newhall farmhouse when staying on the island. 168 The MIA initially focused its operation on agriculture, basing activities at two farms, one located adjacent to North Manitou Village, and the other at the location of the former Crescent lumber camp. During the 1920s the MIA maintained a large free-range beef cattle herd, and substantially expanded the orchard acreage devoted to cherry production. The MIA also began transforming the island landscape into a more marketable recreational resource. In 1926 the association released a small herd of white tailed deer on the island with the intent of eventually establishing a population large enough to sustain hunting both for sport and the for the national venison market. The following year the MIA constructed a sawmill near its North Manitou Village farm, and began harvesting small amounts of timber to provide lumber and shingles for the construction and maintenance of island buildings. Both of these ventures—sport-oriented recreation, and timber harvesting-became increasingly important components of the MIA's business during subsequent decades.

¹⁶⁵ Glenn C. Furst, My Point of View (n.p., 1992), 77.

¹⁶⁶ Giles E. Merritt, handwritten recollections, 11 February 1986, Sleeping Bear Dunes National Lakeshore, Empire, Mich.

¹⁶⁷ Furst, My Point of View, 77; Giles E. Merritt, handwritten recollections dated 30 January and 11 February 1986, Sleeping Bear Dunes National Lakeshore, Empire, Mich.; Paul Maleski, Jr., interview by authors, 26 July 1997.

¹⁶⁸ Rusco, North Manitou Island, 18.

A Sportsman's Paradise

During the 1930s management of the island deer herd became an increasingly important part of the MIA's operation. Other wildlife species, including raccoon, pheasant, ruffed grouse, and wild turkeys, were introduced in an attempt to make the island even more attractive as a sportsman's retreat. 169 However, deer was the species most favored by Angell and the managers of the Manitou Island Association. Jean Lundquist, who spent summers on the island during the late 1930s through the 1950s, recalled that Angell planted fields of alfalfa near Cottage Row to encourage deer to visit the village area. During the late 1930s the MIA ceased harvesting apples from the vast Beuham orchards, leaving the annual crops as fodder for the growing deer herd. Angell also banned dogs from the island for fear that they would chase or kill young deer. 170 By 1930 the white-tailed deer population had dispersed throughout the entire island. Trails were evident by 1935, and two years later a noticeable browse-line was visible in the island forests. The MIA obtained a breeder's license from the State of Michigan for deer and raccoon, allowing the association to manage and sell the animals for profit. Eighteen deer were harvested in 1927 during the first hunt organized by the MIA.

The MIA's sport hunting business became more sophisticated during the 1930s. Hunters were accommodated at the MIA lodge (the former Cottage Row dining hall), which could house 20-25 guests at a time. ¹⁷¹ During the winter of 1938-39 the MIA began feeding the deer in order to maintain the population at artificially high levels. ¹⁷² Throughout the hunting season all of the MIA's employees worked as guides, and additional labor was procured from the mainland. ¹⁷³ Edgar McKee, the MIA manager during the late 1930s, recalled the carefully planned, almost business-like, character of the hunting experience:

None of the hardships of hunting and taking care of your deer existed then. The hunter was transported to his hunting spot and picked up at the appointed time. The hunter's job was to shoot the deer his guide pointed out to him. The guide took care of preparing the deer and dragging him to the appointed spot to be picked up.¹⁷⁴

Each sportsman was assigned a guide and a specific one-mile-square section within which he could hunt.¹⁷⁵ The MIA guaranteed that each hunter would take home at least one deer. MIA employees routinely cruised the island for deer to be given to hunters who failed to shoot and kill their own buck or doe. Apparently the island deer population was so large that obtaining the requisite number of animals for this purpose was a relatively simple task. McKee described the process:

I would take my rifle in the company station wagon with a couple of guides, and drive through the woods. Most of

- ¹⁶⁹ Rusco, North Manitou Island, 9-10; Rita Hadra Rusco, "Living on the Island," Detroit Free Press (Detroit Section), 18 October 1981, 16.
- ¹⁷⁰ Jean Lundquist, interview by Eric MacDonald, Leland, Mich., 27 June 1999, notes filed at Sleeping Bear Dunes National Lakeshore, Empire, Mich.
- ¹⁷¹ Fritz, "History Data Report," 32; I. H. Bartlett, The North Manitou Island Deer Herd: A History and Suggested Management Plan, 4 February 1944 (Lansing: Deer Investigations, Game Division, Department of Conservation), 1-2; Rusco, North Manitou Island, 43.
- ¹⁷² I. H. Bartlett, "North Manitou Island's Deer Herd," *Michigan Conserva*tion, September 1944, 10.
- 173 Rusco, North Manitou Island, 43.
- ¹⁷⁴ Edgar McKee, "North Manitou Island 1937-1942," n.d. [ca. 1992], Sleeping Bear Dunes National Lakeshore, Empire, Mich. McKee was MIA business manager during 1937-1942.
- 175 Lundquist, interview.

the deer I shot, I shot from the window of the car. The boys would dress them out, and throw them in the back of the car. It was not unusual to take in four or five deer in one afternoon.¹⁷⁶

During this period, hunting privileges most likely were reserved for the invited guests of MIA members. North Manitou Island thus functioned as an exclusive hunting preserve, much in the tradition of the private hunting clubs that became popular with wealthy men during the late nineteenth century.¹⁷⁷

William Angell apparently spent little time on the island during the 1920s and 1930s. Most likely he was too preoccupied with his responsibilities at Continental Motors to spend long vacations on the island or to concern himself in the management of the Manitou Island Association. In 1929, Angell became president of the corporation's newly-formed subsidiary, Continental Aircraft Engine Co. The following year the founder of Continental Motors was removed from his leadership position, and Angell took over as head of the company. Angell managed to keep the company financially solvent through the Great Depression, and in 1939 resigned his dual role as treasurer and president of the corporation. Although no longer at the helm of Continental Motors, Angell continued to serve on the boards of several automotive industry corporations. 178

After his retirement from Continental Motors, Angell may have found more time for his many business investments, including the Manitou Island Association. Angell gradually bought out other members of the MIA. He also increased his island land holdings, purchasing several Cottage Row properties during the late 1920s and 1930s. Angell purchased the former North Manitou Island the U.S. Coast Guard station, which closed in April 1933, and acquired the U.S. lighthouse property at the southeastern end of the island in 1938. The By 1942, Angell owned seventy per cent of the Manitou Island Association, and Roger Sherman owned the remaining thirty per cent. Beau Lundquist recalled that Angell spent most of his summers on the island during the 1940s.

In 1942, Angell employed Jack Hadra as his island business manager, and hired Hadra's wife, Rita, as the island postmaster and operator of the MIA general store. The MIA's primary profit-making activities at this time were cherry production and deer hunting. Continental Motors continued to reserve much of the deer hunting season, which extended from mid-October through mid-December, for the exclusive use of its executives and business clients. In addition to cherry production and deer hunting, Angell attempted to revive logging on the island during 1942-43 by hiring a professional forester to develop a management plan for the island, and by entering into a timber cutting contract with Raymond Phiel and Edward Cowles of Gaylord, Michigan. 183

¹⁷⁶ McKee, "North Manitou Island 1937-1942," n.d.

177 The Turtle Lake Club, the first deer hunting club in Michigan, was organized in 1883. In 1931 the club, which was limited to twenty-one members, controlled over 31,000 acres in Michigan's northern lower peninsula. Much of the high status of deer hunting was derived from the fact that white-tail deer populations were extremely small throughout the state during the early decades of the twentieth century. Once plentiful, the deer population declined dramatically due to logging and forest fires, and to market hunting. The population began to increase slowly after the state outlawed practices such as "dogging" (i.e., hunting with packs of trained dogs), limiting the hunting season, and enacting a "one buck" limit in 1921. Given the extreme scarcity of whitetailed deer in Michigan during the 1920s and 1930s, the artificially high population on North Manitou Island certainly must have represented a sportsman's paradise.

- ¹⁷⁸ Wagner, Continental!, 70, 5-10, 16-17, 38.
- ¹⁷⁹ Leelanau County Deeds, Liber 69,
 427428; Fritz, "History Data Reports,"
 89; Rusco, North Manitou Island, 18-19.
- 180 Rusco, North Manitou Island, 12.
- 181 Lundquist, interview.
- 182 Rusco, North Manitou Island, 86.
- ¹⁸³ Baxtlett, North Manitou Island Deer Herd, 3; Rusco, North Manitou Island, 39-40.

The Angell Foundation

In 1946 Angell and Sherman modified the original 1928 trust agreement to extend its life and to reflect the new composition of the Manitou Island Association. The new agreement gave Angell a controlling 7/10 interest in the trust, with power to deal with real estate, and management and operation of the properties. ¹⁸⁴ Sometime between 1946 and 1949, Roger Sherman divested his 3/10 interest in the Manitou Island Association. By 1949, Angell owned ninety-five per cent of the MIA, and Avery Wing of Detroit owned the remaining five per cent share. That year, Angell created a non-profit, charitable foundation—the William R. Angell Foundation—to be the beneficiary of his 19/20 interest in the MIA. The Angell Foundation was organized at a meeting held on 14 April 1949. Its purpose was:

To promote and assist in the education, training and development of young people; to establish, capitalize and conduct students' revolving loan funds and make therefrom character loans to worthy, needy young people pursuing or about to pursue regularly offered courses of study in colleges, universities, business and nurses' training schools; to assist in the comfort and welfare of men, women, young people and children, particularly the young, aged, sick, poor, crippled, handicapped, and underprivileged.¹⁸⁵

The foundation was formally incorporated several months later, on 29 September, and the first official meeting of its board of trustees was held on 6 October. Angell, who served as the organization's president, endowed the foundation with an initial gift of one thousand dollars. W. Craig Keith, who had served under Angell as Secretary of Continental Motors during the 1930s, was vice-president, and Angell's personal secretary, Margaret Londergan, was the foundation's secretary-treasurer. Angell intended the trust to exist in perpetuity, although he included a provision for its dissolution by a unanimous vote of the foundation trustees. However, only four months after its creation, the foundation was confronted with the problem of disposing of its interest in the MIA when William Angell unexpectedly died on 25 January 1950, after being struck by a Detroit city bus. 187

In addition to the 19/20 interest in the Manitou Island Association, the Angell Foundation's endowment included a farm in Oakland County, and a building in Muskegon, Michigan. The foundation board initially considered liquidating its interest in the Manitou Island Association. According to W. Craig Keith, "the initial board of trustees were [sic] groping with the problem of how to accomplish the purposes of the Foundation with a major fixed asset of possible meager return possibilities; how the return might be increased; what additional investment would be required to that end; whether or not conversion to a liquid basis was desirable; and management problems operating the island by remote control, etc."

¹⁸⁴ Amendment, Trust Agreement between William R. Angell and Roger Sherman and the Detroit Trust Company, 21 January 1946, Arthur Jay Lacy Papers, Bentley Historical Library, Ann Arbor, Mich.

¹⁸⁵ Trust Instrument, 14 April 1949, Angell Foundation Collection, Sleeping Bear Dunes National Lakeshore, Empire, Mich.

¹⁸⁶ Articles of Incorporation, and Minute and Record Book of the William R. Angell Foundation, Arthur J. Lacy Papers, Bentley Historical Library, Ann Arbor, Mich.

¹⁸⁷ Rusco, North Manitou Island, 121; Muskegon Chronick, n.p., [1950]; Leelanau Enterprise, 26 January 1950.



Figure 2.25. During the 1950s and 1960s the Angell Foundation increased efforts to market North Manitou Island to sportsmen. In 1965 a trip to the island was the grand prize in the annual archery and fishing contests sponsored by the National Industrial Recreation association (NIRA). Pictured from left to right are Don Neer, executive director of the NIRA; Andy Lang, 1965 fishing champion, and Gene Caudill, 1965 archery champion.

Offers for purchase came from individuals who desired to use the island as an exclusive resort, much in keeping with the MIA's management practices, and from persons interested in exploiting the island's timber resources. Bids came from the Ball family of Muncie, Indiana, from Continental Motors Corporation, Philoo Corporation, the Catholic Diocese of Grand Rapids, and from John Newhall of Glencoe, Illinois, who once had resided on the island as overseer of his family's fruit orchards. After considering these offers, however, the foundation trustees apparently decided to retain their interest in the MIA, and thereafter took an active role in its management. 189

The Angell Foundation initially continued the orientation of the MIA's business ventures. The trustees considered harvesting the island's timber resources, but concluded in 1953 that "it was doubtful if going in business such as lumbering on the island was feasible considering the risks and management problems." The board agreed that "it would be better to have the money placed in some income producing investments." After 1955, however, the MIA ceased harvesting cherries. 191 At about the same time, the Foundation trustees reduced the number of MIA employees and closed the island store. Thereafter the Foundation trustees concentrated their attention on developing the island's recreation amenities (figure 2.25). After the MIA lodge was destroyed by fire in 1953, the former U.S. Coast Guard dwelling was remodeled to serve as a new lodge to accommodate hunters and other paying guests. The MIA also remodeled the

¹⁸⁸ Memorandum, [W.] Craig Keith to [Board of Trustees, William R. Angell Foundation], 31 December 1976, Angell Foundation Collection, Sleeping Bear Dunes National Lakeshore, Empire, Mich.

189 Ibid. The membership of the Board of Trustees of the William R. Angell Foundation and the governing board of the Manitou Island Association essentially overlapped, and the two bodies customarily held their meetings on the same date. The only individual outside the Angell Foundation who maintained an interest in the Manitou Island Association, was Avery Wing, who owned a five percent share. Wing also held claim to one of the Cottage Row properties, although he had never received the deed to his lot from William Angell. According to W. Craig Keith, the Angell Foundation board periodically negotiated with Wing in an attempt to gain complete control of the MIA, in a couple of instances offering him a position as a foundation trustee if he would agree to sell his share. Wing never accepted an offer from the foundation.

190 Ibid.

191 [Charles Brown], "Preliminary Report of Chairman of Commission After Taking Additional Testimony, Re: North Manitou Island," United States of America V. Security Trust Company, et al and Unknown Owners; Detroit Bank and Trust Company, Trustee, et al, and Unknown Owners, U. S. District Court for the Western District of Michigan, Southern Division, 18 January 1983, Angell Foundation Collection, Sleeping Bear Dunes National Lakeshore, Empire, Mich.

North Manitou Island Assn.

Leland, Michigan.

Phone: Area Code 616-ED 4-3962.



Figure 2.26. The Manitou Island
Association logo incorporated imagery
designed to appeal to recreational
sportsmen. During the 1960s and 1970s
the logo appeared on brochures used to
promote North Manitou Island as an ideal
spot for hunting and fishing. The foundation
primarily marketed the island to
corporations.

coast guard boat house, and rented three Cottage Row houses to guests. 192 A 1958 article published in the Muskegon Chronicle noted that

the island's chief activity now centers around its licensed deer farm, only operation of its kind in Michigan, which annually attracts sportsmen from throughout the Midwest who pay well for the privilege of coming to the island with a deer guaranteed. Exempt from state regulation, the island deer season usually opens in late October and closes in late December. Nearly a fourth of the 1,000 animal herd is harvested each year, with hunters permitted to take deer of either sex, but big bucks are the prime target. 193

Reversing its earlier decision, the Foundation trustees entered into a logging contract with the firm of Jurica and Day in 1956 in an attempt to off-set the huge cost of its deer-feeding program. The Foundation's goal was to implement a sustained-yield system by selecting only trees larger than fourteen inches in diameter, and removing approximately one million board feet per year on a twenty-year rotation basis. 194 The Foundation also increased its island land holdings during the late 1950s by purchasing the Maleski farm in 1955, and acquiring the Bournique property over a three-year period from 1956 to 1959.

The profitability of the MIA's deer hunting business was impacted by changes to the federal tax codes during the 1950s. Most of the association's contracts were with executives of major corporations, who organized hunting excursions to the island as entertainment for clients. The tax code changes limited the extent to which corporations could deduct such entertainment expenses, with the result being that "the time of large hunting parties of one corporation with exclusive use of the facilities was over. The smaller lodge was shared by groups of different corporations."195 To make the island more attractive to sportsmen the MIA stocked the island with pheasants, Guinea hens and chukar partridge and wild turkeys between 1961 and 1963. 196 The MIA produced illustrated brochures to advertise the island's recreational amenities, claiming in one brochure that "... here, you'll find things as they were when the Indians roamed the land." and "There are 15,000 acres of unspoiled forest.... There are abandoned lumber camps and settlements evoking memories of an earlier day. There are no stores, no bars ... there are no movies, and no drive-ins."197

In an attempt to expand the island's appeal beyond deer hunters, the MIA promoted Lake Manitou for sport fishing (figure 2.26). The lake's native smallmouth bass were supplemented with rainbow trout in 1964, 1965, and 1968. A MIA brochure from the late 1960s described the lake as teeming "with big bass, scrappy trout and panfish; weedbeds and holes, wild-rice paddies and dropoffs, fallen timbers and rocky coves." The island accommodated twenty fishermen or twenty-five hunters at a time ¹⁹⁹ A brochure

¹⁹² Rusco, North Manitou Island, 127-131.

¹⁹³ Muskegon Chronicle, 8 October 1958, n.p.

¹⁹⁴ Gordon Charles, "Swiss Family Manitou," *Detroit News Magazine*, 23 March 1980, 34-36; 38.

¹⁹⁵ Rusco, North Manitou Island, 131.

¹⁹⁶ Gordon Charles, "Swiss Family Manitou."

¹⁹⁷ Brochure, "You Are Welcome at North Manitou Island . . . A Comfortable Wilderness Where Hunting, Fishing and Nature Are Still as They Used to Be," ca. late 1960s, MIA Collection, Sleeping Bear Dunes National Lakeshore, Empire, Mich.

¹⁹⁸ Gordon Charles, "Swiss Family Manitou," 34-36; 38; Fritz, "History Data Report," 35, citing Gordon Charles newspaper articles.

¹⁹⁹ Brochure, "You Are Welcome."

Figure 2.27. Schematic plan of North Manitou Island airport, ca. early 1960s. During the 1940s through the 1960s, air travel played an increasingly important role in the business operations of the Manitou Island Association, and in the lives of island residents. After World War II, charter service to the island was available from Traverse City and Frankfort. The island landing strip represented a vital link to the mainland. Airplanes delivered fresh food, packages, and supplies to island residents, a role that was especially crucial during times when boats could not cross the Manitou Passage. The Manitou Island Association improved the island's landing facilities during the 1960s, and thereafter prominently featured a sketch plan of the North Manitou landing strip in its marketing literature.

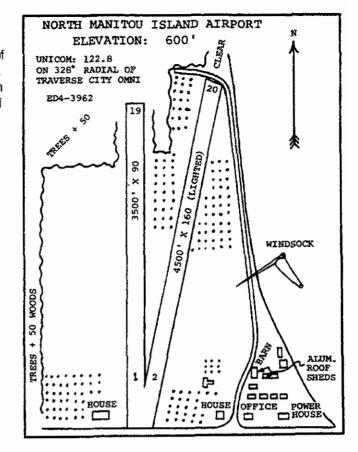




Figure 2.28. The airplane era on North Manitou Island may have begun in August 1926 when an aircraft landed in the large agricultural clearing near North Manitou Village. The airplane carried several Muskegon and Chicago businessmen, including Ross W. Judson, who then was President of Continental Motors Company. William Angell and Roger Sherman also probably used the fourteen-passenger tri-motor Fokker airplane owned by Continental Motors for trips to the island. Continental Motors was a leader in using aircraft for business travel, and developed its own airport at Muskegon in 1926. The company formed an aeronautical division in 1928, and a subsidiary, Continental Aircraft Engine Co., in 1929.

describing the MIA fishing package included testimonials from executives and sportsmen representing locales across the country. Fishermen paid a fee of twenty-five dollars per day, which included room, board, transportation to and from Lake Manitou, and use a boat on the lake.²⁰⁰ Deer hunters in groups of five or more paid \$225 each for three days. Individual hunters paid ten dollars extra for the same package, which included lodging, meals, and guide service and the MIA guarantee of "a deer for every hunter."²⁰¹ To improve access to the island by the island's privileged clientele, the MIA expanded and improved the island landing field during the 1960s, extending the runway to 4,500 feet and erecting an airplane hangar (figures 2.27 and 2.28).²⁰²

During the 1970s the MIA continued to promote sport hunting and fishing on the island. The MIA's promotional literature more profusely extolled the island's natural beauty. "North Manitou Island has 15,000 acres of natural forest teeming with wildlife in the

²⁰⁰ Brochure, "The North Manitou Island Fishing Club Cordially Invites You to an Island Adventure with Unusual Angling Opportunities," ca. 1960s, MIA Collection, Sleeping Bear Dunes National Lakeshore, Empire, Mich.

²⁰¹ Brochure, "The North Manitou Island Hunting Club Cordially Invites You to a Deer Hunter's Paradise," brochure, ca. 1960s, MIA, Sleeping Bear Dunes National Lakeshore, Empire, Mich.

²⁰² Rusco, North Manitou Island, 88.

Collection, Sleeping Bear Dunes National Lakeshore, Empire, Mich. ²⁰⁴ Gordon Charles, "White Tails of the Manitous," Kalamazoo Gazette, n.d. (ca. Winter 1974/75), Betty Kramer Collection, Leelanau County Historical Society, Leland, Mich. ²⁰⁵ Blake Forslund to Arlene and Marvin Fluelling, 19 March 1976, Angell Foundation Collection, Sleeping Bear Dunes National Lakeshore, Empire, Mich.; Hamish Ogilvie, "Michigan's 'Secret' Island, North Manitou," Michigan Living Motor News 60(4): 24-25 (October 1977). ²⁰⁶ Eric A. Bourdo and James A. Johnson, "Observations and Recommendations Concerning Forest Management on North Manitou Island," report to the Angell Foundation (Houghton, Mich.: Michigan

Technological University (MTU), 5

William Davis, Angell Foundation

Collection, Sleeping Bear Dunes National Lakeshore, Empire, Mich.

January 5, 1976); James A. Johnson to

²⁰⁷ Fritz, "History Data Report," 35.

208 Gordon Charles, "White Tails of

"Michigan's 'Secret' Island," 24-25.

²⁰⁹ E. R. Hames, "Program of Gifts,"

30 November 1976, Angell Founda-

tion Collection, Sleeping Bear Dunes

²¹⁰ Memorandum, [W.] Craig Keith to

[Board of Trustees, William R. Angell

Foundation], 31 December 1976.

National Lakeshore, Empire, Mich.

the Manitous;" Hamish Ogilvie,

²⁰³ Brochure, "Welcome to North

Manitou Island," ca. 1970s, MIA

unspoiled beauty of early Michigan" claimed one brochure, urging the reader to "see [the island] in the verdant cool summer or in the fall when nature splashes the island with vivid golds, reds and ochres." By the mid-1970s the cost of a three-day deer hunt had risen to \$345. The MIA permitted only 15 hunters, and a total of no more than 20 guests on the island at any one time, significantly fewer than the 20-25 sportsmen that were accommodated during the 1960s. In 1976, the MIA raised its deer hunting rate to \$400 to cover increased expenses. The association also offered, for the first time, a two-day spring turkey hunting package for \$175, which included a two-turkey guarantee. The fisherman's package included room and meals, transportation to Lake Manitou, and use of a fishing boat for \$50 per day. On the first time, and use of a fishing boat for \$50 per day.

While its marketing strategy focused on North Manitou's natural beauty, the MIA continued the program of timber harvesting on the island, which had commenced in 1956. In 1972 the MIA entered into a five-year agreement with the Lake Michigan Hardwood Company for selective cutting of timber on the island. According to the agreement, the minimum annual harvest was one million board-feet, while the maximum was set at one-and-a-half million board-feet. During the mid-1970s the MIA explored the possibility of initiating experimental cuttings on the island in cooperation with foresters from Michigan Technological University (MTU). The MTU researchers apparently visited the island and provided the MIA with a report outlining management recommendations; however, it appears as though no further research was done following this initial work.²⁰⁶ The MIA protected the aesthetic appearance of the island by confining loggers to areas not immediately adjacent to roads and trails. 207 The island's forests thus provided the MIA with two marketable resources—the "unspoiled beauty of early Michigan," and the more tangible commodity of timber. In fact, the income generated from timber harvesting substantially subsidized the MIA's deer hunting operation. 208 Combined, the MIA's deer hunting and forestry ventures were modestly profitable: other than 1975, gross revenues generated by these activities "more than covered taxes and expenses."209 The Angell Foundation used its MIA profits to award small grants to colleges.

Proposed Dunes Park

Although the Angell Foundation succeeded in obtaining a reasonable return on its MIA investments, its board of trustees remained somewhat ambivalent about the organization's continued involvement in the business. The board routinely considered purchase offers for its share of the MIA, and took a "keen interest" in a 1962 proposal to include the island in "a proposed dunes national park." Although early plans for Sleeping Bear Dunes National Lakeshore omitted the island, the final proposal included both North and South Manitou islands within the national lakeshore boundaries. The legislation enacted by Congress on 21 October 1970, authorized the creation of

a 71,000-acre national park preserve along the northeastern shore of Lake Michigan, encompassing

... certain outstanding natural features, including forests, beaches, dune formations, and ancient glacial phenomena ... along the mainland shore of Lake Michigan and on certain nearby islands in Benzie and Leelanau Counties, Michigan ... ²¹¹

The National Park Service's land acquisition program initially targeted lands on the Michigan mainland. After acquiring most of the lands within the authorized mainland boundary and South Manitou Island, the National Park Service (NPS) offered the Angell Foundation \$4.5 million for North Manitou Island in 1977. The foundation board refused this offer, contending that the island was worth more than three times the NPS appraisal. The matter was thereafter referred to federal courts, with hearings in the condemnation case beginning in 1978.²¹² While the NPS appraisal was based on the island's value for recreational use, the Angell Foundation derived its valuation from the estimated worth of the island's natural resources. The foundation board investigated the potential profitability of sand and gravel mining, concocting an elaborate proposal for creating a harbor at the southern end of the island in conjunction with a huge mining operation. The board also considered the profit to be generated from more intensive exploitation of the island's timber resources, and even hired a team of nuclear engineers to assess the island's potential as a nuclear power station. The Angell Foundation's final appraisal was based on a scheme for developing the island into a modern facility for producing and processing cherries. After considering testimony from expert witnesses in the cherry industry, a federal judge set the value of the island at just over \$11 million in 1983. The National Park Service took possession of the island the following year.

The National Park Era

The Angell Foundation began preparing for National Park Service take-over of the island during the late 1970s. The MIA held its final deer hunt, which yielded just over 500 animals, during the 1977-78 season in an attempt to reduce the island herd to roughly 150 animals. The MIA also discontinued supplemental feeding of the deer herd after the 1977-78 season. ²¹³ During autumn 1979, the MIA moved the caretaker and his wife from the island, and sold most of the equipment and furnishings on the island. ²¹⁴ The discontinuance of both hunting and the supplemental feeding program had a tremendous impact on North Manitou's natural systems. The island deer population soared, severely stressing the island's native plant communities. The groundlayer and understory vegetation of the island's forests were eliminated almost completely by the voracious deer herd, which suffered mass starvation during the winter and spring seasons. Local newspapers reported the plight of the North Manitou Island

²¹¹ Sleeping Bear Dunes, U.S. Code, vol. 4, sec. 460x (1970).

²¹² Dale W. Rhoades to E. R. Hames, W. H. Davis, Blake Forslund, W. M. Skillman, C. H. Higgins and Avery Wing, 29 August 1977, Angell Foundation Collection, Sleeping Bear Dunes National Lakeshore, Empire, Mich.

²¹³ McCullough, Dale R., and David J. Case, "The White-tailed Deer of North Manitou Island, Michigan," (Empire, Mich.: Sleeping Bear Dunes National Lakeshore, 13 August 1982), 13; Gordon Charles, "Swiss Family Manitou."

²¹⁴ Rusco, "Living on the Island," 22.

²¹⁵ Allen Campbell, "N. Manitou Island Has a 'Deer Problem,'" *Leelanau Enterprise*, 22 January 1981, 8; Allen Campbell, "80% of North Manitou's Deer Died Last Winter," *Leelanau Enterprise*, 5 August 1982, 1.

²¹⁶ McCullough and Case, "Whitetailed Deer of North Manitou," 167-168.

²¹⁷ Hazlett and Vande Kopple, Terrestrial Vegetation, 59.

²¹⁸ U.S. Department of the Interior, National Park Service, "Sleeping Bear Dunes National Lakeshore, Statement for Management," (Empire, Mich.: Sleeping Bear Dunes National Lakeshore, April 1993), 41; U.S. Department of the Interior, National Park Service, "Development Concept Plan/Interpretive Prospectus, North Manitou Island, Sleeping Bear Dunes National Lakeshore, Michigan," (Empire, Mich.: Sleeping Bear Dunes National Lakeshore, November 1987), 24-26.

²¹⁹ National Park Service, "Development Concept Plan/Interpretive Prospectus," 9. American chestnut trees are native only to Michigan's southern-most counties. North Manitou Island's grove of chestnut trees probably was planted by homesteader Frederic Beuham, who owned the site during the late 1800s. Today, the trees are threatened by a parasitic organism, Endothia parasitica, which was introduced into North America from Asia shortly after 1900 See Hazlett and Vande Kopple, Terrestrial Vegetation, 57; Norman F. Smith, Michigan Trees Worth Knowing, Rev., 5th ed. (Lansing: TwoPeninsula Press/ Michigan Department of Natural Resources, 1978), 55.

²²⁰ National Park Service, "Development Concept Plan/Interpretive Prospectus," 7, 9.

²²¹ Hazlett and Vande Kopple, Terrestrial Vegetation, 30, 41. deer, generating negative publicity for both the National Park Service and the Angell Foundation.²¹⁵

While federal courts debated the fair market value of the island, the National Park Service hired a team of wildlife researchers to study the white-tailed deer problem. The consultants' report, completed in 1982, concluded that the island's native plant and animal communities would recover only if the deer population was reduced immediately and thereafter maintained for several years at levels of 200-300 animals. To achieve this end, the researchers recommended that the NPS coordinate public deer hunts on an annual basis. 216 The following year, plant ecologists studying the island's vegetation reached a similar conclusion, advising that "a large scale reduction in the deer population, if not their total removal from the island, should be a top priority if the declining quality of the vegetation is to be abated and later reversed."217 The first NPS-sponsored deer hunt on North Manitou Island occurred during the late autumn of 1984, the year that the agency officially gained control of the property.

Following the implementation of an annual deer hunt, and other natural resource management measures undertaken by the National Park Service, the condition of North Manitou Island's plant and wildlife habitats has improved. NPS management policies have emphasized protecting the island's outstanding natural features and significant plant and wildlife habitats from adverse human impacts, while also encouraging regeneration of North Manitou's forest and dune vegetation. The island provides habitat for several rare plant species, including Pitcher's thistle (Cirsium pitcheri), a federally-listed endangered species, and two State of Michigan threatened species: Pumpelly's brome grass (Bromus pumpellianus), and American chestnut (Castenea dentata). In addition to these threatened plant species, two bird species on the federal list of endangered species—piping plover and bald eagle—nest on the island.

Among North Manitou's most important and fragile habitats are its shoreline and perched dunes, the "Pot Holes," and its wetlands (figure 1.3). The flora of the island's black ash swamp communities, which extend southward from Lake Manitou, is extremely diverse, including several species found nowhere else on the Manitou islands. The area around Tamarack provides habitat for a few bog species that likewise are unique to North Manitou Island. The island is certainly one of the best places within the Sleeping Bear Dunes region for visitors to experience the diversity and beauty of nature. Yet, despite the resilience and apparent integrity of its natural systems, the island landscape remains extensively, if not permanently, altered by the accumulated effects of human habitation. The aesthetic character and distribution of the island's habitat types—dunes, woodland, and clearings—are most clearly a cultural artifacts (figure 2.29).

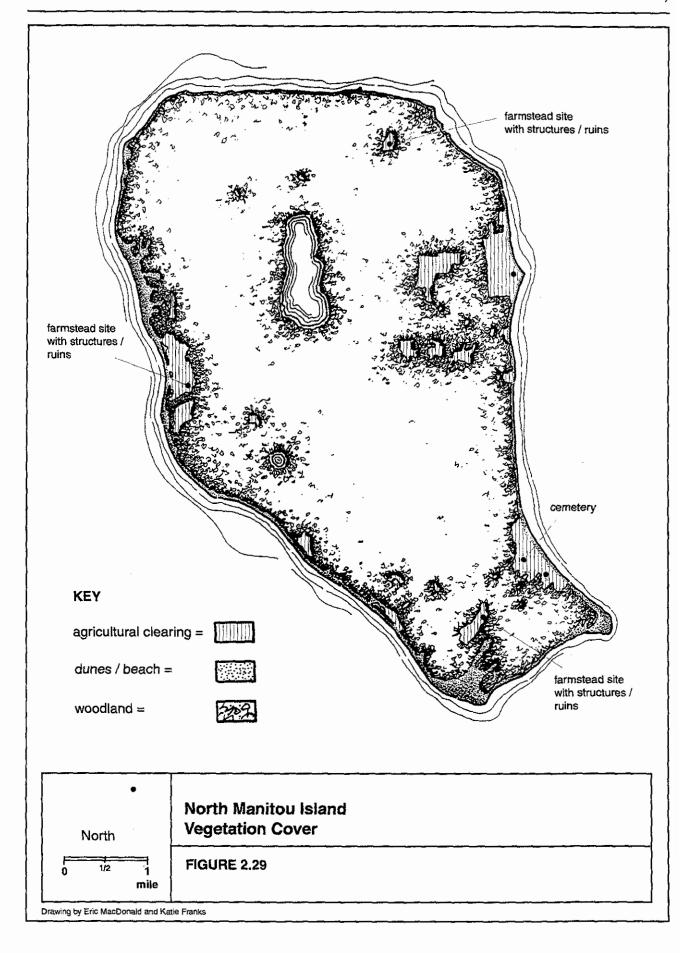




Figure 2.30. Stems of raspberries and sugar maple seedlings become entwined in the remains of an abandoned automobile on North Manitou Island, a metaphor for the ways in which humanity and the non-human world are interwoven.

Environmental Legacy of Euro-American Habitation on North Manitou Island

The landscapes of North Manitou Island, even those places that are remote from the major nodes of settlement, bear the imprint of past human activities, aspirations, and beliefs. Clues to the island's history are at times overt, such as the old railroad grade that traces an arc through the forests in the northwestern portion of the island. In other instances the evidence is as remarkably, wonderfully subtle, as the feathery, pink tufts of spotted knapweed and the lacy blooms of wild carrot nodding in the breeze. It is possible to read narratives of both progress and declension in such a landscape. In clearing vast swaths of virgin hardwood forests during the mid-nineteenth century, crews of wood choppers permanently altered a complex ecosystem. Contemporary observers, Margaret Fuller among them, certainly were aware of the magnitude of the destruction, yet they nonetheless viewed it as a step in the inevitable, on-going process of transforming the American wilderness into a suitable setting for human civilization.

Following the wood choppers, Euro-American settlers claimed patches of the North Manitou Island landscape as their own, inserting human-dependent biotic systems based on agriculture and animal husbandry amidst the fragmented, native forest ecosystems. The settlers integrated new, humanized plants and animals into the landscape, and translocated "wild" species from other parts of the continent. It is, perhaps, such introductions that most para-

Figure 2.31. Trail through recent-growth forest on North Manitou Island, 1995.



doxically blur traditional distinctions between nature and culture. A hybridized variety of sweet cherry or a purebred Angus steer is readily recognized as a product of both human culture and non-human nature. However, a "wild" deer, or a raccoon, or an American chestnut tree in a landscape that did not previously accommodate them, is a less obvious manifestation of the manipulative power of humankind.

Today, visitors to North Manitou Island experience nature in a setting that undeniably has been shaped by its unique history—a landscape that continues to evolve in accord with both human values and processes of non-human nature (figure 2.30). The immense, verdant hardwood forests that blanket most of the island landscape bear only a superficial resemblance to the "enormous growth of trees" that so impressed William Cullen Bryant and other visitors to North Manitou a century and a half ago. Although northern hardwoods today comprise slightly more than eighty per cent of the island's vegetative cover, years of extensive timber harvesting and agriculture have cumulatively altered the aesthetic quality and species composition of the island's forests (figures 2.29 and 2.31). In many locales, logging repeatedly "set back" the course of ecological succession on the island. The timber harvesting practices of Smith & Hull and Peter Stormer, for example, altered the species composition of vast areas of island forests, creating small gaps and openings in the forest canopy. Such gaps consequently increased the amount of "edge" habitat (i.e., border areas between forest and open communities) on the island. In these sunny openings, plant species such as wild raspberries proliferated, as did edge-habitat wildlife species such as rabbits. Such unintended sideeffects of logging greatly benefited many island residents, who utilized wild foods to supplement their diets. 222 Non-human nature

²²² Furst, My Point of View, 77.

and human culture have interacted on North Manitou Island in intricate, diverse, and unexpected ways.

Timber extraction, maritime, agricultural, and recreational activities all left their mark on the land. Evidence of past logging activities is still fresh in the North Manitou landscape, revealed in earthen depressions and scattered artifacts at former logging camps, the relict railroad grade of the Smith & Hull operation, and numerous, large stumps scattered throughout the forests. Most of the hardwood stands on North Manitou are either second- or thirdgrowth timber. 223 NPS natural resources consultants McCullough and Case estimated that thirty percent of the island's hardwood forest (i.e., approximately twenty-five per cent of the island) had been logged between 1962 and the time of their study in 1982.²²⁴ The numerous, large eastern hemlock trees noted by federal land surveyor Orange Risdon in 1847, and identified by Harry Nichols Whitford as a prime component of the climax northern hardwoods forest, have all but disappeared so that today this species is a relatively minor constituent of the island's forest communities. Currently, the dominant tree species on the island are American beech, and sugar maple. Black cherry (Prunus serotina)—a species that was mentioned only infrequently in Risdon's notes—also is abundant. 225 The relative abundance of black cherry and other early successional, or "gap phase," species such as paper birch, yellow birch (Betula alleghaniensis), and big-tooth aspen, indicate the youthfulness of much of the North Manitou's forested landscapes.

Although it is difficult to assess the ecological effect of the large numbers of cattle and hogs that roamed North Manitou Island for several decades during the nineteenth and early twentieth centuries, considerably more is known about the impact that the introduced deer herd has had on the island landscape. Established on the island during the late 1920s, the deer population has altered the ecology all of the island's major terrestrial ecosystems—forests, open fields, and dunes. A 1983 study concluded that deer apparently had eliminated sugar maple and hemlock saplings from the forest understory, and had virtually extirpated 22 species from the island forest communities, including two species—Taxus canadensis and Mitchella repens—which in 1901 were described as being "very abundant." 226

Deer have eliminated most understory herbs and shrubs, and trimmed young trees of their lower branches, giving the forests an open, park-like appearance. The white-tailed deer population also has retarded the typical pattern of succession in abandoned farm fields by eliminating young shrubs and tree saplings. Hazlett and Vande Kopple estimated that the appearance of old fields on North Manitou is essentially "the same as it was almost fifty years ago." In addition, seven dune species are presumed to be absent from the island due to over-browsing by deer. The extensive dune "heaths" consisting of Juniperus and Arctostaphylos in association with sand

²²³ Hazlett and Vande Kopple, Terrestrial Vegetation, 23.

²²⁴ McCullough and Case, "White-tailed Deer of North Manitou," 5.

²²⁵ Hazlett and Vande Kopple,
Terrestrial Vegetation, 23; McCullough
and Case, "White-tailed Deer of
North Manitou," 5-6; Risdon, survey
notes; Whitford, "Genetic Development of the Forests"; Hazlett and
Vande Kopple, op. cit., defined six subtypes of northern hardwood forest on
North Manitou Island: (1) BeechMaple-Yellow Birch-Cherry; (2) Beech;
(3) Maple; (4) Beech-Maple-Aspen; (5)
Beech-Maple-Yellow Birch-CherryAspen-Ash, and (6) Oak.

²²⁶ Hazlett and Vande Kopple, Terrestrial Vegetation, 44.

²²⁷ Hazlett and Vande Kopple, Terrestrial Vegetation, 46.

cherry (*Prunus pumila*), which were described by Henry Cowles in 1899, have disappeared.²²⁸ In total, deer have eliminated or greatly reduced the populations of at least thirty-three common, native species on North Manitou Island; the island flora today includes nearly twenty-five per cent fewer native species than that of neighboring South Manitou Island.²²⁹ Deer also altered the island's wildlife populations. During the 1960s snowshoe hare and foxes disappeared from the island, probably because deer eliminated the underbrush and herbaceous plants upon which the hare depended.²³⁰

Although certainly extensive, the effects of human habitation on North Manitou Island's natural system have not been entirely subtractive. Euro-American settlers brought with them both domesticated and "wild" animal and plant species, and thereby increased the diversity of lifeforms on the island. Most of these alien plant and animal species have not persisted in the landscape since the end of agricultural activities on the island. However, many of the remaining species appear to be well-established constituents of the island's current ecosystems. In 1983, Hazlett and Vande Kopple documented 31 non-native plants species on the North Manitou (see Appendix G). These included plants that formerly were cultivated for food, such as Welsh onion, chives, asparagus, apple, and butternut, as well as ornamental plants like lily-of-the-valley, grape hyacinth, Norway maple, lilac, and flowering quince. In addition to these intentionally-introduced species, several exotic, "weed" species have become firmly established in the island landscape, including sour dock (Rumex crispus), and Queen Anne's lace, or wild carrot (Duacus carota).231 Spotted knapweed (Centauria maculosa), a Eurasian species that is particularly abundant in open fields, is believed to have been introduced into the United States during the 1890s as a contaminant in shipments of European alfalfa seed.²³² In all, Hazlett and Vande Kopple estimated that nearly 28 per cent of the island's flora consisted of non-native species.²³³

The extent to which nature and culture were blurred in terms of human perception was most evident during the 1920s and 1930s when the Manitou Island Association attempted to improve upon nature by stocking the island's forests with wild game, and planting Lake Manitou with fish. As described in the association's marketing literature of the 1960s and 1970s, the resulting landscape seemed more "natural" or "wild" than ever before. For more than forty years, sportsmen ventured to the island to avail themselves of nature's stupendous bounty, seemingly oblivious that their sport was dependent upon a wholly humanized ecosystem. Similarly, island residents during the 1920s and 1930s supplemented their diets by gathering native blackberries and hunting wild rabbits, apparently not cognizant that the astonishing abundance of these species, too, was as much a product of human activities as it was a gift of nature.

As this account of human habitation and environmental manipulation on North Manitou Island attests, wild, non-human

²²⁸ Hazlett and Vande Kopple, Terrestrial Vegetation, 44, 46.

²²⁹ Hazlett and Vande Kopple, Terrestrial Vegetation, 45.

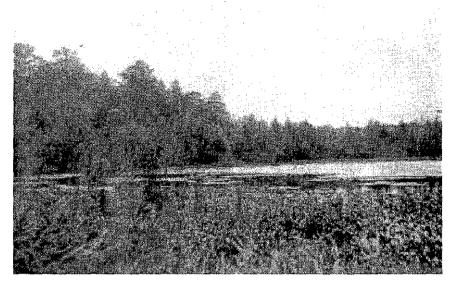
²³⁰ Gordon Charles, "Swiss Family Manitou." As of 1998, fox have since reappeared, while snowshoe hare remain absent from the island fauna.

²³¹ See the "Catalogue of Vascular Plants" in Hazlett and Vande Kopple, Terrestrial Vegetation, 62-102.

²³² Randy Hoffman and Kelly Kearns, eds. Wisconsin Manual of Control Recommendations for Ecologically Invasive Plants (Madison, Wisc.: Bureau of Endangered Resources, Department of Natural Resources, 1997), 44.

²³³ Calculated from a table provided by Hazlett and Vande Kopple, Terrestrial Vegetation, 45.

Figure 2.32. This view of Tamarack Lake was captured sometime during the early 1900s by John Newhall of one of his associates. During the 1940s the lake was a popular "frogging" destination for Jean (Londergan) Lundquist, daughter of William Angell's executive secretary, Margaret Londergan.

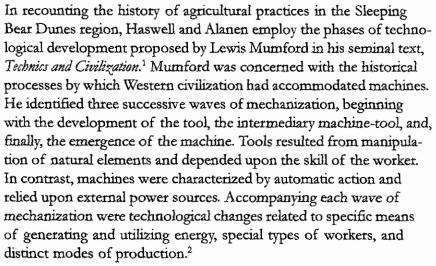


nature has undeniably placed limitations on human activities. At the same time is has profoundly inspired poets, recreationists, scientists, and professional resource managers. For example, while promoting timber harvesting on their island land, the Newhalls and their summer guests took pleasure drives along the island's densely wooded trails, camped among the trees in tents and primitive shacks, bathed and canoed in Lake Manitou, and picnicked along the shores of Lake Michigan. The photograph scrapbooks of John Newhall, which now reside at the Chicago Maritime Society, contain numerous views of recreational activities. However, they also contain various composed depictions of "nature" on the island, revealing the photographer's affinity for natural beauty as expressed in the island's forests, lakes, and dunes (figure 2.31).²³⁴ William Angell likewise has been described as a man who loved "nature," one who "was fond of every tree and bush." While he actively manipulated the island's wildlife populations, Angell also prohibited the use of motorized equipment on Lake Manitou in order to preserve the natural quietude of the setting.²³⁵ The history of a landscape like North Manitou Island reveals the extent to which human culture and nonhuman culture are intertwined, and the limitations that our cultural traditions place on our understanding of both.

²³⁴ John Newhall Collection, Chicago Maritime Society, Chicago, Ill.

Chapter Three

Cultivating a Comfortable Wilderness



Mumford divided the process by which Western culture assimilated the machine into three historical phases: eotechnic, paleotechnic, and neotechnic. In Mumford's scheme, the era preceding the eotechnic phase set the stage for the later development of machine technology. During this "pre-machine" era, "the dominant ways of life were the outcome of agriculture, and the religion and science of the day." Extractive industries such as timber cutting, quarrying and mining were of prime importance. The subsequent eotechnic phase was a "period of preparation" during which "all of the key discoveries facilitating mechanization were either invented or foreshadowed." The principal inanimate power sources were water and wood. Technology during the eotechnic phase was based on handicraft, and



¹ Susan Olson Haswell and Arnold R. Alanen, A Garden Apart: An Agricultural and Settlement History of Michigan's Sleeping Bear Dunes National Lakeshore Region (Omaha: Midwest Regional Office, National Park Service; Lansing: State Historic Preservation Office, Michigan Bureau of History, 1994); Lewis Mumford, Technics and Civilization (New York: Harcourt, Brace and Company, 1934).

² Mumford, Technics and Civilization, 65-138

³ Ibid., 64.

both human economy and society were closely connected with agriculture.4

Mumford's paleotechnic phase roughly corresponded with the industrial revolution, during which external forces of nature were harnessed, and materials, capital and labor were consolidated and systematized. Use of human power diminished substantially, and coal became the predominant source of mechanical power.⁵ In Mumford's view the most recent phase, the neotechnic, could not be defined as a period, but was, rather, a "physical-social complex."6 The neotechnic phase was characterized by the preeminence of science in driving technological change. The application of scientific knowledge to technology fueled the development and use of synthetic compounds and materials, more rigid managerial protocols in production, automatism in operation, and the promulgation of completely standardized goods. Neotechnic technology relied on a new form of power: electricity. Neotechnic culture was preoccupied with power, mobility, and communication. The eotechnic, paleotechnic, and neotechnic phases were sequential, yet they were somewhat indistinct temporally. Mumford characterized the phases as "successive but over-lapping and interpenetrating." In Mumford's view, contemporary mechanical civilization was "the sum total" of all the phases.

Mumford's model is based on an analysis of the history of European culture, particularly that of England and Western Europe, and it applies to human industry in general, not just to agriculture. His phases are defined by dominant techniques that exerted a commanding influence over techniques. Thus, Mumford's phases do not deal so much with technical systems, but do constitute a workable, if somewhat vaguely defined, chronology of technological development. Other historians have grappled with the task of providing a more refined analysis of technological development, often by attempting to incorporate more elements and multiple analytical perspectives. For example, the French social philosopher Jacques Ellul's The Technological Society, published twenty years after Mumford's Technics and Civilization, examined the history of techniques from the perspectives of economics, politics, and sociology. Ellul claimed to be concerned primarily with presenting an accurate account of fact without causal explanation. Nevertheless, in The Technological Society Ellul essentially was concerned with the erosion of moral values, and the economic and political consequences of a society dominated by technicians.9

A more recent, significant attempt at providing a more refined analysis of the history of techniques is Bertrand Gille's two-volume The History of Techniques. As described by Gille, the historical aspect of this project attempted to "avoid too many divisions" and "to reintegrate each history of techniques into a larger historical grouping, which could itself be easily linked to economic or demographic history and the history of science or ideas, and finally also factual history ..." Gille's work certainly is the most comprehensive recent

⁴ Ibid., 109.

⁵ Ibid., 151-211.

⁶ Ibid., 212.

⁷ Ibid., 212-267.

⁸ Ibid., 109.

⁹ Jacques Ellul, The Technological Society, trans. John Wilkinson (New York: Alfred A. Knopf, 1964). Originally published in French in 1954 as La Technique ou l'enjeu du siècle by Max Leclerc et C.

¹⁰ Bertrand Gille, ed., The History of Techniques, vol. 1, Techniques and Civilization (Montreux, Switzerland: Gordon and Breach Science Publishers, 1986). Originally published in French in 1978 as Histoire des Techniques l'Encyclopédie de la Pléiade by Editions Gallimard.

attempt to define historic "technical systems," encompassing a chronology of technical development that spans from Australopithecine pebble tools to the "transmission of thought" via computers. Yet, like Mumford's phases, Gille's systems remain somewhat vaguely and arbitrarily defined chronologically, and the aspects which link them are often obscure.

Although formulated more than six decades ago, Mumford's simple three-phase chronology still serves as a useful heuristic for considering the changing nature of agricultural technologies during various times in the past. Mumford correlated the eotechnic phase, which occurred during 1000 - 1750 A.D. in Europe, with pre-1850 society and culture in the United States. He speculated that the paleotechnic phase emerged in the United States after circa 1850, and that it reached its peak around the beginning of the twentieth century. By 1910 the neotechnic phase was evident in both Europe and America, where "a definite counter-march against paleotechnic methods began in industry itself." 11

In adapting Mumford's scheme to the history of agricultural practices in the Sleeping Bear Dunes Region, Haswell and Alanen applied the term "pre-technic" to the subsistence agriculture practiced by aboriginal peoples during ca. 1000 - 1840 A.D.¹² Euro-American settlers introduced eotechnic practices, circa 1840 -1860s. Although still primarily a subsistence strategy, the eotechnic agriculture of the settlers utilized tools such as metal plowshares and draft animals. During the paleotechnic phase, which began during the 1860s, agriculture was "extensive, rather than intensive, in nature" and was undertaken not solely for subsistence, but to yield "maximum profits with minimum effort;" paleotechnic production strategies emphasized "cash crops." Haswell and Alanen associate the neotechnic phase, which arrived in the national lakeshore region in 1939 when the Cherryland Rural Electrification Association was organized, with the emergence of "scientific" agriculture. This phase was characterized by increasing reliance on external energy sources, "accelerated mechanization of agriculture," and "a more rational approach to land use." Neotechnic agricultural production was further integrated with, and dependent upon, national and international markets.14

The chronology described by Haswell and Alanen is consistent with the approach of Dandekar and Schoof, whose typology of Michigan farms correlates physical form with the historical development of agriculture. In Dandekar and Schoof's assessment, the influence of ethnicity on building forms and farmstead layout gradually gave way to economic, technical and functional considerations. They proposed five distinctive farm types related to markets and modes of production. Farm types differed relative to several factors: the extent of the market for which they produced; the agricultural commodities produced and the organizational structure of the farm enterprise; the mode of production; and the extent of

Mumford, Technics and Civilization, 111, 151-155, 214.

¹² Haswell and Alanen's use of the term "pre-technic" should not be construed to imply that aboriginal peoples lacked technology. Rather, the term suggests that most of the tools used for agriculture during this period were fashioned directly from elemental resources (e.g., stone, wood, metal, bone, etc.), and inspired by "natural" prototypes. In the Sleeping Bear Dunes region, more complex tool manufacture, as exemplified by Native American ceramics and metallurgy during the Woodland and Historic Contact periods, would have approached Mumford's "eotechnic" phase. The agricultural practices of the Woodland and Historic Contact periods might be considered transitional between "pretechnic" and eotechnic agriculture. As defined by Haswell and Alanen, the full arrival of the eotechnic phase in the Sleeping Bear Dunes region is marked by the use of simple, industrially produced tools (e.g., metal plowshares), and limited marketing of surplus agricultural commodities. See Haswell and Alanen, Garden Apart, 65.

¹³ Haswell and Alanen, Garden Apart, 65-66.

¹⁴ Ibid., 66.

mechanization. Although the array of types also was delimited chronologically, the Michigan farms studied by Dandekar and Schoof rarely fit exclusively within one pure phase or type. Rather, most farms underwent a process of continual transformation, although change sometimes occurred very slowly. At any given time, farms that exemplified a production and marketing pattern typical of an earlier period often remained viable, coexisting with later types.¹⁵

Prehistoric Resource Exploitation and Pre-technic Agriculture

Pre-technic agricultural practices probably never were prevalent on North Manitou Island. Before the arrival of Euro-American settlers. the native inhabitants of the Sleeping Bear Dunes area most likely used the island primarily as a hunting and fishing ground and, perhaps, for ceremonial purposes. Archaeological data indicate that the island was occupied by aboriginal peoples by at least 1000 BC, and again between AD 1000 and the time of contact with Europeans (ca. 1630-1650). The clustering of known archaeological sites on North Manitou Island suggests that prehistoric occupation was concentrated along the eastern shore of the island.16 One of the sites, 20LU38, was relatively substantial in size, suggesting that it may have been occupied by a larger group over a longer period of time, or that it may represent the accretional occupations of smaller groups.¹⁷ The sites indicate that the resources of North Manitou Island may have been utilized more intensively than would otherwise be expected of island habitats in general. The reason for this is unclear, as it is likely that island habitats contained few, if any, floral or faunal elements that would have been less abundant or unavailable on the mainland.

Faunal resources that Late Archaic and Woodland peoples may have obtained on North Manitou Island include small mammals such as squirrel, hare, and perhaps beaver and muskrat. Other animals, such as black bear, white-tailed deer, and moose, probably were hunted on the mainland, but most likely were not available on the island. None of these species inhabited the island at the time of Euro-American settlement (ca. 1830). In addition to small mammals, passenger pigeons, and various water birds and their eggs may have been available on the island during short seasonal intervals. Aboriginal peoples may have used sheltered shoreline sites on the island as fishing camps. A severely deteriorated dugout canoe that was recovered in 1966 from Lake Manitou suggests that the island's inland lake may have been utilized as a source for fish, turtles, or frogs. 18

Archaeological evidence collected from the mainland indicates that the Late Archaic and Late Woodland inhabitants of the lakeshore region collected and utilized wild plants, although it is not clear whether such activity also occurred on the islands. ¹⁹ It seems unlikely that prehistoric people engaged in large-scale manipulation of the environment on North Manitou. Nonetheless, prehistoric occupation

¹⁵ Hemalata C. Dandekar and Daniel F. Schoof, "Michigan Farms and Farm Buildings: 150 Years of Transformation," *Inland Architect* 32(1):61-67 (1988).

¹⁶ Charles E. Cleland, "A Preliminary Report on the Prehistoric Resources of North Manitou Island," (Detroit: William R. Angel Foundation, 1967), 11.
17 William A. Lovis, Robert Mainfort, and Vergil E. Noble "An Archaeological Inventory and Evaluation of the Sleeping Bear Dunes National Lakeshore, Leelanau and Benzie Counties, Michigan" (National Park Service, 1976), 91.

¹⁸ Cleland, "Preliminary Report," 10-11. Cleland states that the canoe was "probably of Indian manufacture," but adds that it could have been produced by "early European settlers or lumbermen."

¹⁹ See Appendix B for a more detailed discussion of potential human impacts on prehistoric vegetation, and a list of present-day floral elements of North Manitou Island that may have been utilized by aboriginal populations.

of the North Manitou may have impacted the island's native plant communities. The most likely influence is the possible introduction or dispersal of native weedy species. In any event, these impacts would have been incidental, rather than deliberate.

Early Euro-American Settlement and Agriculture

The impact of European and Euro-American immigrants on the North Manitou Island landscape was more deliberate and extensive. By the mid-1840s crews of wood choppers were diligently felling the island's hardwood forests. Though undocumented, the first farms on the island certainly consisted of small, subsistence plots that were cultivated by these men. A few subsistence gardeners may have traded island-grown food with other members of the local population, but most probably did not produce food or fiber commodities for export to external markets. This pattern of small-scale, subsistence agriculture probably persisted through the 1850s, although by 1860 there was at least one large-scale farming operation on the island.

The 1860 federal population census counted 270 inhabitants on North Manitou Island, ten of whom were farmers: Carl Botohaen, Frederick Crofs, John Dalton, Bobos Trumel, Arney Christopher, Stephen Bower (?), Charles L?, George Sits, Christopher Curts, and John Matlanch (?), who reported his occupation as both farmer and fisherman. North Manitou's farmers had emigrated to the island from Hanover, Prussia, Hamburg, Norway, Denmark, New York, and Pennsylvania. In addition, there were seven farm laborers on the island, all of whom resided in the dwelling of farmer Stephen Bower.²⁰ Unfortunately, the 1860 manuscript schedules record only the commodities produced by the farm of Nicholas Pickard, who was not residing on the island in 1860. The scale of Pickard's farm was atypical of the Sleeping Bear Dunes region, and certainly also of the island. It comprised 200 acres of improved land, and 200 acres of woodland, all of which was valued at \$5,000. He owned 6 horses, 7 milch [milk] cows, 24 oxen, 20 other cattle, 40 sheep, and 5 swine. During the previous year, Pickard's farm produced 200 bushels of wheat, 200 bushels of corn, 1,500 bushels of oats, and 800 bushels of potatoes. Pickard's sheep furnished 50 pounds of wool, and with the milk from his dairy herd he produced 300 pounds of butter.²¹The primary market for Pickard's farm most likely was the large crew of wood choppers that served as the workforce for his lucrative wood cutting operation. However, it seems reasonable to propose that Pickard may have taken advantage of the island's function as a Great Lakes fueling station to market commodities such as wool and butter to distant urban markets. Thus, Pickard's farm may represent a significant large-scale, commercial agricultural operation in a region and era where small-scale, subsistence (i.e., pre-technic) agriculture was the norm.

Haswell and Alanen note that farms on North Manitou and South Manitou islands had larger amounts of improved acreage than

²⁰ U.S. Census Office, "Eighth [1860] Census of the United States-Population," microfilm copy of manuscript schedules, Library of Michigan, Lansing; U. S. Census Office, "Eighth [1860] Census of the United States-Schedule 4, Productions of Agriculture," microfilm copy of manuscript schedules, State Archives of Michigan, Lansing; Haswell and Alanen, Garden Apart, 36. Some of the entries on the copies of the manuscript schedules at the Library of Michigan are not legible. Little is known about these early North Manitou agriculturists, although an unidentified secondary source in the Kramer Collection of the Leelanau County Historical Society, Leland, states that John Dalton arrived on North Manitou Island in 1848. According to this source, Dalton married Amanda Dexter, the daughter of Moses H. Dexter, who operated a blacksmith business on the island during the mid-1850s.

21 U.S. Census Office, "Eighth [1860] Census of the United States-Schedule 4, Productions of Agriculture." The data reported in the 1860 manuscript schedules for the federal census of agriculture and those published by the state of Michigan do not agree. Haswell and Alanen (Garden Apart, 70) report that the North Manitou Island farm of Nicholas Pickard "produced 1,500 bushels of Indian corn, 800 bushels of buckwheat, 200 bushels of rye, and 50 bushels of potatoes. A flock of 40 sheep had yielded 50 pounds of wool, and 300 pounds of butter had been processed from the milk of seven cows." The source of these data may have been Secretary of State of the State of Michigan, Statistics of the State of Michigan, Compiled from the Census of 1860, Taken by Authority of the United States (Lansing: John A. Kerr & Co., 1861). Haswell and Alanen note that such discrepancies may reflect errors in the original returns, which later were corrected in the published version of the 1860 census of agriculture. In any event, it is apparent that the farming operation recorded by the federal census in 1860 was an atypically large operation. farms on the mainland in 1870.22 The vast tracts of cleared timber land on the islands, as well as the presence of large-scale operations like that of Nicholas Pickard, certainly contributed to the more advanced state of agriculture on the islands during the 1860s. Although none of North Manitou Island's 91 inhabitants claimed farming as their primary occupation in the 1870 federal census of population, two of them did produce agricultural goods. Hugh Robinson, who reported his occupation as butcher, owned North Manitou real estate valued at \$3,000. A 32-year-old unmarried Irish immigrant, Robinson had 300 acres of improved land, and 100 acres of woodland. The value of his farm was \$1,500. He owned two horses, four milk cows, two oxen, ten other cattle, and seven swine, altogether valued at \$1,060. During the previous year he had produced 150 bushels of rye, and paid \$200 in wages, including board. The other North Manitou land owner engaged in agriculture was Nicholas Pickard, who listed his principal occupation as "wood merchant." He had 200 acres of improved land, and 120 acres of woodland. In addition to his farm, valued at \$3,000, Pickard owned farm implements and machinery worth \$200, and livestock valued at \$1,230, including eight horses, one mule, three milk cows, eight other cattle, and six swine. During the previous season he had produced 125 bushels of rye and 200 bushels of oats, and had paid \$300 in wages, including board.²³

Early Homestead Farms on North Manitou Island

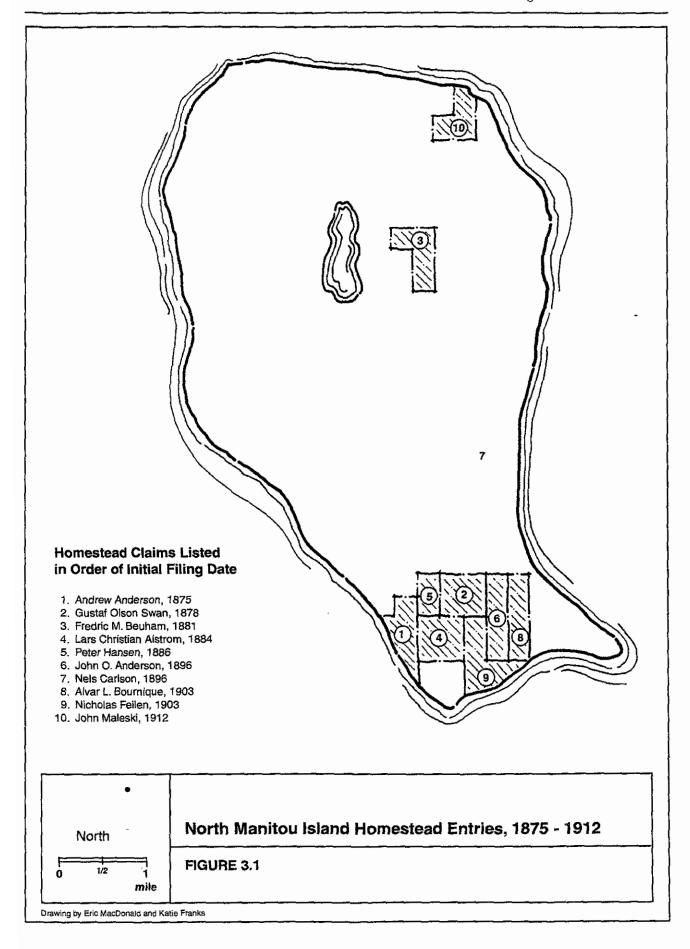
Several events at the national level impacted the development of agriculture in the United States during the 1860s. Foremost of these were the political and economic turmoil caused by the Civil War, and passage of the Homestead Act in 1862. The Homestead Act represented a more liberal land policy than the 1841 Preemption Act that it superseded, and as such, it was opposed by eastern industrialists and southern slaveholders. The succession of the southern states from the Union ended opposition to the Homestead Act in Congress, and it subsequently was passed and signed by President Lincoln on 27 May 1862. The Homestead Act allowed the head of any family, who was also a U.S. citizen or intended citizen, to claim up to 160 acres of land within the surveyed public domain. Claimants acquired title to the homestead parcel by residing upon the land and making improvements over a five-year period. By paying \$1.25 per acre, claimants could commute their entry into full title, provided they had resided upon and improved the land for six months. In Michigan, approximately three million acres of public lands were distributed into private ownership through homesteads.24

Unlike other areas of the Sleeping Bear Dunes region, enactment of the Homestead Act did not have an immediate impact on the landscape of North Manitou Island (figure 3.1). Forty percent of the 141 homestead entries for lands within the current national lakeshore boundaries were filed between 1863 and 1865. Two entries were made for land on South Manitou Island as early as January 1863.²⁵ In

²² Haswell and Alanen, Garden Apart, 77.
²³ U. S. Census Office, "Ninth [1870]
Census of the United States—Population," microfilm copy of manuscript schedules, Library of Michigan, Lansing; U. S. Census Office, "Ninth [1870]
Census of the United States—Schedule 3, Productions of Agriculture," microfilm copy of manuscript schedules, State Archives of Michigan, Lansing.

²⁴ Haswell and Alanen, Garden Apart, 39.

²⁵ Ibid., 43, 40.



²⁶ Homestead Entry #7013, Final Certificate #5308, National Archives and Records Administration, Washington, D. C. The first homestead entry on North Manitou Island was not made by Richard Kitchen in 1863, as reported in Haswell and Alanen, Garden Apart, 40. Kitchen's entry was for land on South Manitou Island. See Brenda Wheeler Williams, Arnold R. Alanen, and William H. Tishler, 'Coming through with Rye': An Historic Agricultural Landscape Study of South Manitou Island at Sleeping Bear Dunes National Lakeshore, Michigan (Omaha: Midwest Field Area, National Park Service, 1996), 34.

²⁷ Homestead Entry #7390, Final Certificate #6012, National Archives and Records Administration, Washington, D. C.

²⁸ U. S. Census Office, "Tenth [1880] Census of the United States—Population," microfilm copy of manuscript schedules, Library of Michigan, Lansing. Baptist Tramel may be synonymous with the farmer identified as "Bobos Trumel" in the 1860 census. Baptist was aged 65 years in 1880; Bobos was 45 years in 1860. Bobos was identified as an immigrant from Hamburg, Baptist an immigrant from Baer (?). The 1870 census lists a "Barbis" Tramel, age 45, a laborer from Bavaria.

²⁹ U. S. Census Office, "Tenth [1880] Census of the United States— Schedule 2, Productions of Agriculture," microfilm copy of manuscript schedules, State Archives of Michigan, Lansing.

³⁰ Haswell and Alanen, Garden Apart, 89. contrast, North Manitou Island's first homestead entry was made more than twelve years later by Andrew Anderson who filed a claim on 6 September 1875. Anderson claimed 159.40 acres at the southern end of the island, in sections 20, 21 and 28 in Township 31 North, Range 14 West. Anderson was an unmarried Swedish immigrant, and he apparently operated a small subsistence farm. He had resided on North Manitou since at least 1870, and may have supplemented his livelihood by fishing.²⁶

Although Nicholas Pickard's farm apparently was thriving still in 1870, it probably ceased operation by the time of his death in 1876, if not sooner. The nearly 70 per-cent decline in the island's population between 1860 and 1870 suggests that the cord wood era was mostly over by the end of the decade. Following the decline of the cord-wood trade, fishing and agriculture became the dominant economic activities on the island. Immigrant settlers began arriving to carve out farmsteads from the cut-over land. At least one woodsman, Adam Maleski, and likely several others, remained on the island through this transition period. Maleski worked on the island as a wood chopper during the early 1870s. In the late 1870s he moved to the island with his wife, Mary, and their infant daughter, and engaged in fishing and agriculture. Sometime during the 1880s he developed a small farm in the northern half of Section 28, T32N, R14W. Gustaf Olson Swan, an emigrant from Sweden, filed North Manitou Island's second homestead entry on 22 October 1878, slightly more than three years after Andrew Anderson claimed the island's first homestead. Swan and his wife Mary owned one milk cow, two other cattle, and four poultry. They cultivated corn, oats, and barley on two acres of cleared land.27 Following the demise of Pickard's cord wood operation, small subsistence farms such as those of the Swans, Maleskis, and Andrew Anderson probably were typical of North Manitou agriculture (figure 3.2).

The 1880 federal population census counted seven farmers on North Manitou Island: Andrew Anderson, Gustav O. Swan, Frank Hanson, Larson Larson, Francis Etli, John Strang, and Baptist Tramel.²⁸ Agricultural census data exist only for the first six. Anderson, Swan, and Hanson reported that they owned their farms, while Larson, Etli, and Strang were tenant farmers paying cash rent.²⁹ According to Haswell and Alanen, the 1880 census data suggest that the farms on North Manitou and South Manitou islands "generally followed the same patterns of production as those on the mainland," which included potatoes, cereal crops, and hay that supported no more livestock than was necessary to supply the family with meat and dairy products.30 It seems likely that this pattern predominated on North Manitou Island. For example, Andrew Anderson's farm produced barley, corn, oats, potatoes, beef and eggs during 1879 valued at \$300. Lars Christian Alstrom, who homesteaded 160 acres in Section 21, T31N, R14W, produced modest quantities of potatoes, corn, rye, oats and turnips on six acres of cultivated land. Consistent with a

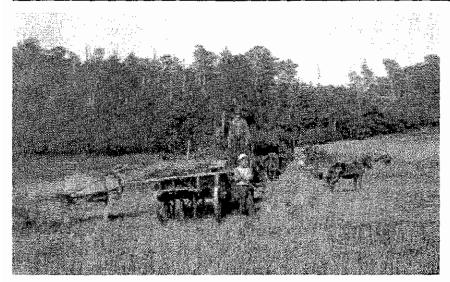


Figure 3.2. Although the identities of these farmers are unknown, this photo depicts the type of diversified, small-scale agriculture that was typical of North Manitou Island's homestead settlers, many of whom were German or Scandinavian immigrants.

diversified production strategy, Alstrom's livestock included four cows, two calves, two pigs, and two sheep.³¹ Only surplus agricultural products were exported, and it is likely that farmers obtained income from other activities such as fishing or wood cutting.

Commercial Agriculture

Although small-scale subsistence farming predominated, large-scale farming returned to North Manitou Island during the 1880s. This larger-scale agriculture was financed by capital that originated from outside the island economy. Silas R. Boardman, a retired banker from Chicago, moved to North Manitou Island in 1884 with his wife Mary, his daughters Carrie and Stella, and his son Walter. According to Josephine Hollister, Boardman moved to the island "in search of health." He eventually acquired most of the eastern portion of the island, making a large purchase from Stella J. Platt in 1890 for lands in sections 21, 22, 27, 28, 33 and 34 in Township 32 North, Range 14 West, and lands in sections 4, 10 and 31 in Township 31 North, Range 14 West. Near the village on the eastern side of the island he built barns, houses, a grocery store, and wooden plank walkways illuminated with oil-burning lanterns.

Boardman's agricultural venture on North Manitou Island centered on beef production and breeding draft horses. Boardman apparently utilized an open-range system, allowing at least some of his livestock to roam the patches of cut-over vegetation and woodlands that extended across his extensive island property.³² In 1890 Boardman had a "celebrated Purcheron [sic] stallion" on his farm, which he used as a stud, bringing it to the mainland "for service."³³ During the mid-1880s the farm was administered by a hired manager, an arrangement that probably continued over the course of Boardman's ownership of the property.³⁴

Securing adequate hired labor on North Manitou Island may have been a problem during this time. In 1896 Boardman placed an advertisement in the *Leelanau Enterprise* for "a party to bale 40 or 50

³¹ Homestead Application #8745, Final Application #6590, National Archives and Records Administration, Washington, D.C.

³² Rita Hadra Rusco, North Manitou Island: Between Sunrise and Sunset (n.p.: Book Crafters, 1991), 55.

³³ Leelanau Enterprise, 17 April 1890.

³⁴ An item in the 12 August 1886, Leelanau Enterprise notes that a "Mr. Hoxie is on his way to assume management of the Boardman stock farm on North Manitou Island."

³⁵ Leelanau Enterprise, 24 December 1896. Since the advertisement was placed in December, Boardman apparently sought labor for the upcoming 1897 season.

³⁶ Leelanau Enterprise, 24 December 1896, 5 June 1890. The 1896 article also suggests that Boardman was using a mechanical hay baler.

³⁷ Rusco, North Manitou Island, 57.

38 Leelanau Enterprise, 1 August 1889.

³⁹ Josephine Alford Hollister, "The Summer Resort on North Manitou Island," February 1989, Sleeping Bear Dunes National Lakeshore, Empire, Mich.

⁴⁰ Homestead Application No. 8188, National Archives and Records Administration, Washington, D. C. Beuham's application was filed at Reed City, Michigan tons of hay on North Manitou Island."³⁵ Newspaper advertisements from the 1890s also indicate that Boardman imported labor from the mainland to complete such tasks as baling hay.³⁶ Rusco also recounts that Boardman placed an advertisement in local newspapers looking to "lease on shares, choice land fenced and free of stumps, where potatoes produced one-hundred-fifty bushels to an acre and beans would yield fifteen to twenty bushels per acre." As part of the deal he offered "teams of horses, use of farm equipment, housing, and a market for the crops," presumably the summer resort community that was developing near North Manitou village.³⁷

The Boardman family retained strong connections with Chicago, and the Leelanau Enterprise routinely reported the comings and goings of Boardman family members to and from the island during the late 1880s and the 1890s. A brief article printed in 1889 in the Leelanau Enterprise reported the visit of a Chicago man to the Boardman stock farm "where we were shown some very fine blooded stock." The article suggests that Boardman may have resided on the island during this time; nevertheless, it seems likely that Boardman conceived of his North Manitou property primarily as a private resort, a sort of "gentleman's farm."

While Silas Boardman was developing his large stock farm near North Manitou Village, Frederic Beuham began developing an extensive commercial fruit farm on a tract of cut-over acreage between the village and Lake Manitou (figure 3.3). Beuham, an unmarried, disabled war veteran, entered a homestead application for 160 acres in Section 33, T31N R14W, on 4 June 1881. 40 During the 1880s Beuham's small farm produced the typical North Manitou agricultural commodities of potatoes and hay. By 1890, however, he had planted 500 fruit trees and vines on the property. Four years later, Beuham used his land as collateral to acquire 1,500 pear and 2,500 apple trees from Stark Bros. Nursery & Orchard Co. Sometime during the fall of 1894 or the spring of 1895, the trees were planted in Beuham's North Manitou orchard, which then encom-



Figure 3.3. Frederic Beuham's North Manitou apple orchard, 1913. Apples and other fruits were the island's primary agricultural exports during the 1910s, when the hundreds of fruit trees planted during the 1880s and 1890s by homesteader Frederic Beuham were mature.

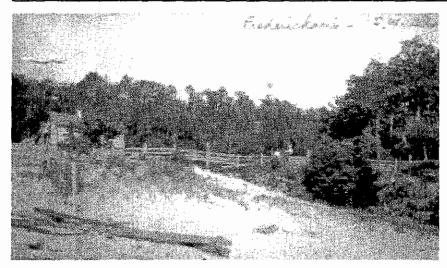


Figure 3.4. Hendrick Frederickson farm, ca. 1900. Frederickson's property was located on the southwestern shore of the island. Like many North Manitou settlers, Frederickson made his living from fishing, in addition to agriculture.

passed 645 acres.⁴¹ The agreement with Stark Bros. indicates that Beuham may have had the financial backing of Silas Boardman and a third party identified as "Mann Bros.," from Two Rivers, Wisconsin.⁴² The scale and character of this planting suggests that Beuham intended his farm to become a profit-making business enterprise. Beuham may have planned to link his North Manitou orchard with the Chicago wholesale fruit market via the numerous cargo-bearing steamships that plied the Manitou Passage. In any event, Beuham's venture was a step beyond the subsistence agriculture that characterized the other North Manitou Island farms.

Challenges Faced by Owners of Small Farms

While Silas Boardman's extensive stock farm and Frederic Beuham's maturing fruit orchard represented the resurgence of large-scale, commercial agriculture on the island, numerous smaller farms persisted. According to the 1894 state census of agriculture, there were 20 farms on North and South Manitou islands. 43 Many of North Manitou's small-scale farms were owned by recent Scandinavian immigrants, including Hendrick Frederickson, Lars Christian Alstrom, John Olaf Anderson, and Nels and Sophia Carlson. Frederickson, an emigrant from Denmark, purchased property in 1883 on the southeastern shore of the island. He later settled along the southwestern shore of the island where he engaged in farming and fishing.44 The following year, Swedish immigrant Lars Christian Alstrom, filed a homestead application for 160 acres in Section 21, T31N, R14W. John Olaf Anderson homesteaded 160 acres in Section 22, T31N, R14W, in 1890. Nels and Sophia Carlson were associated with Boardman's freerange cattle operation. They homesteaded 160 acres in Section 9, T31N, R14W, in 1896.45

After the end of the cordwood era, ca. 1870, the island's population was not large enough to provide a market for surplus agricultural commodities. The viability of commercial agriculture on North Manitou Island thus was contingent on a grower's ability to secure transport of his commodities to external markets. Once an

41 Leelanau Deeds, Liber 23, 168-169; David L. Fritz, "History Data Report on North Manitou Island, Leelanau County, Michigan" (Denver: U.S. Department of the Interior, National Park Service, 1987), ii. Large-scale fruit farming probably developed on North Manitou Island after 1894. As Fritz notes, the 1894 state census of agriculture reports only 33 acres of apple trees and one acre of pear trees for both Manitou islands combined. See Gardner Washington, Michigan Secretary of State, Census of the State of Michigan, 1894, Volume II: Agriculture, Manufactories, Mines and Fisheries (Lansing: Robert Smith & Co., 1896).

⁴² Leelanau Deeds, Liber 23, 168-169. The agreement was received for record on 18 August 1894.

⁴³ Gardner Washington, Michigan Secretary of State, Census of the State of Michigan, 1894, vol. 2, Agriculture, Manufactories, Mines and Fisheries (Lansing: Robert Smith & Co., 1896); Fritz, "History Data Report," ii, 9.

"U.S. Census Office, "Twelfth [1900] Census of the United States—
Population," microfilm copy of manuscript schedules, State Historical Society of Wisconsin, Madison; U.S. Land Office, "Tract Books," vol. 45 (Leelanau County), State Archives of Michigan, Lansing; Fritz, "History Data Report," 7, 87; Rusco, North Maniton Island, 78.

⁴⁵ U.S. Land Office, "Tract Books;" Rusco, North Manitou Island, 54.

integral node in Great Lakes transport routes, North Manitou had become increasingly isolated after its timber reserves had been depleted and coal had replaced wood as the primary fuel for steamers. North Manitou's farmers needed to produce relatively large quantities of agricultural commodities in order to make shipment off the island by steamship economical. For an entrepreneur who was independently wealthy such as Silas Boardman, the investment required to reach this level of production was less of a challenge. Thus, the economic forces that generally encouraged commercial agriculture during the late nineteenth century, probably were heightened on North Manitou Island, where transportation may have been more costly.

On July 24, 1890, the Leelanau Enterprise reported that the steamer Marston Dame was "cavorting about the lake with a cargo of wild Manitou steers," most, if not all, of which probably came from Boardman's free-range stock farm. 46 Commodities such as grains had to be transported off the island to mainland grist mills for processing and shipment to larger markets. For the island's independent farmers—those who could operate only at a small scale—this was not an insignificant task. They may have hired a fisherman and his boat, or ventured across the lake themselves. The Leelanau Enterprise printed the following account on April 10, 1890:

Two Swedes, from North Manitou Island whose names we were unable to catch on, came over and landed on our shore last week in a sail boat with a grist of 50 bushels which they left at I. T. Pheatt's grist mill. It seems these gentlemen have tried all the grist mills along the shore within a reasonable distance from home and have found by experience that Mr. Pheatt will do as good a job as they can get done anywhere.⁴⁷

The island's increasing isolation from larger markets, combined with its relatively poor soils, limited agriculture to those individuals who were willing to tolerate subsistence conditions, or to those who could afford the significant capital investment required to make commercial agriculture on the island viable.

Investing in a large-scale agricultural venture in a marginal locale was a risky venture. In attempting to establish large-scale commercial fruit production on North Manitou Island, Frederic Beuham may have overextended himself financially. Through the terms of their agreement, Stark Bros. evidently gained possession of Beuham's North Manitou orchards, and in 1899 sold property encompassing more than 1,800 acres to Franklin and Benjamin Newhall of Chicago. Some of the acreage involved in this transfer may have belonged to Silas Boardman, who was Beuham's partner in the orchard venture. According to Josephine Hollister, Franklin Newhall and his son, Benjamin, bought out Silas Boardman's North Manitou farming operation in 1899.

⁴⁶ Leelanau Enterprise, 24 July 1890.

⁴⁷ Leelanau Enterprise, 10 April 1890.

⁴⁸ Leelanau Deeds, Liber 24, 318.

⁴⁹ Hollister, "Summer Resort." Photographs in the collection of the Chicago Maritime Society suggest that the Newhalls were present on North Manitou Island as early as 1897.



In consolidating the land holdings and agricultural operations of both Boardman and Beuham, the Newhalls effectively expanded and diversified the farming operation on North Manitou Island. Franklin Newhall was a Chicago wholesale fruit dealer who resided in the affluent suburb of Glencoe, Illinois. Benjamin Newhall took charge of the island orchard operations, planting two sweet cherry orchards and three tart cherry orchards, as well as increasing the acreage devoted to plums, pears and apricots. His brother, John, resided on the island as manager of the family's farm and resort cottages. The former Beuham homestead was the working hub of the orchard activities. There, the Newhalls utilized a packing shed located along the road that led from the orchards to the village (figure 3.5). Fruit was packaged at the shed, then transported to the village dock to be shipped to Chicago via steamship.50 According to Ruchhoft, the Newhalls' North Manitou farm also produced wheat, oats, rye, corn, and potatoes.51

A 1900 atlas of Leelanau counties indicates that the Newhalls owned more than 8,350 acres on North Manitou; by then they had become the island's largest land holders. Gottlieb Patek owned almost four thousand acres, and about a dozen individuals owned smaller parcels clustered at the southern end of the island.⁵² The manuscript schedules for the 1900 population census do not distinguish North Manitou's inhabitants from other residents of Leland Township. However, several familiar North Manitou names

Figure 3.5. Apple packing crew, North Manitou Island, ca. 1910s. The men and women featured in this photograph probably were island residents whom the Newhall family hired to harvest, sort, and pack apples that were shipped to the family's wholesale fruit warehouses in Chicago. The structure depicted in the background probably stood in the large apple orchard planted by Frederic Beuham and Stark Bros. Nursery & Orchard Co. during the 1880s and 1890s.

⁵⁰ Hollister, "Summer Resort;" Rusco, North Manitou Island, 57-58.

⁵¹ R. H. Ruchhoft, Exploring North Manitou, South Manitou, High and Garden Islands of the Lake Michigan Archipelago (Cincinnati: Pucelle Press, 1991), 184.

⁵² Fritz, "History Data Report," 12-13.



Figure 3.6. Employees of the Newhall family pose with baskets of apples at the Frederic Beuham orchard. The distant structure in the far upper right corner of this photograph may be the barn pictured in figure 3.5.

appear on the census rolls, including the families of John and Ildra [sic] Anderson, Christian and Nartha (?) Olestrom [sic], Peter and Mary Swenson, Adam and Christina [Mary] Maleski, Philip Drow (?), Nelson Carlson, Henry Frederickson, John Johnson, and Nicholas Felin [sic].⁵³ In addition to engaging in subsistence agriculture on their own farms, some of these families may have supplemented their livelihoods by working for the larger, well-financed operation of the Newhalls (figure 3.6).

Perhaps inspired by the success of Boardman's stock farm, other North Manitou farmers adopted free-range husbandry of beef cattle. The Maleski family developed a large herd of cattle at their farm on the northern end of the island. Many years later, Paul Maleski, Jr., recounted that the family's cattle herd once numbered 150 animals. Most of the stock were allowed to roam the island freely, and were branded to distinguish them from cattle belonging to other islanders. When the animals returned to the farm for salt or hay, Paul Maleski would corral them. Animals butchered on the farm were sold to the Leland Mercantile. Larger numbers of cattle were shipped to more distant markets by steamer. Such shipments were often arranged in cooperation with other island agriculturists, including Nels Carlson and Peter Stormer, who each contributed a few animals. The cattle were collected in a paddock near the North Manitou village dock, where they were loaded onto a vessel with a capacity of up to forty head.54 The Maleskis continued free-range cattle ranching until the early 1910s when conflicts with the Newhalls over land use forced them to reduce the size of their herd to only the number of animals that could be supported on the family's small acreage.55

A different sort of farming enterprise began in 1903 at the southeastern tip of the island when Alvar and Mary Bournique filed a homestead application for 152.20 acres. Bournique subsequently developed an extensive complex of log farm buildings, fields, pasture lands and a small orchard. Like Silas Boardman's earlier farm at North

⁵³ U.S. Census Office, "Twelfth [1900] Census of the United States— Population."

⁵⁴ Paul Maleski, Jr., interview by Betty L. Mann, 29 August 1984, audio tape recording on file at Leelanau Historical Museum, Leland, Michigan.

⁵⁵ Paul Maleski, Jr., interview by the authors, 26 July 1997.

Manitou Village, the Bournique place was as much a summer resort as it was a working farm. Unlike Boardman, however, it is not clear that the Bourniques ever operated their North Manitou Island farm as a profit-making, business venture. Rather, the Bournique property was used primarily for recreational purposes. More akin to a private, modern "dude ranch," it was occupied only during the summer months by the family and their guests. The Bourniques hired their neighbor, John O. Anderson, to manage their farm and look after it during their absence. They were, like Boardman and the Newhalls, absentee land owners during much of the year.

Agriculture as an Adjunct to Timber Harvesting

Extensive, organized efforts to harvest the island's second-growth timber during the 1900s once again brought an influx of population, and a sizable local market for food. Like the cordwood era, however, the large lumber operations tended to supply much of these commodities themselves, and it is questionable whether the lumber communities represented a significant market for the island's independent farmers. Rather, the lumber camps may have been more significant as a source of employment for island residents, with private farms and homesteads used mostly for subsistence. Nonetheless, like before, the lumber company farms were large in size. Hay and grain apparently were cultivated on the island to supply the logging operations, and the company used some of the cleared land for agriculture to produce food for its workers and to support a small dairy herd and other livestock (figure 3.7).56 A photograph of the Crescent townsite published in biologist Robert T. Hatt's 1916 study of island wildlife, depicts corn fields bounded by a wooden rail fence.57

Sometime after 1913, Peter Stormer, who began logging on the island ca. 1908, purchased the Alstrom farmstead and moved his family there. Until 1923, Stormer used the farm to sustain his family, as well as the men and animals laboring in his two North Manitou lumber camps. Ethel Stormer recalled that the family raised "a great many cattle" and kept about 40 to 45 horses for the lumber camps. 58 To supply their crews with beef, Stormer and other logging camp operators had to provide their cattle with supplemental feed during the winters. The island farms apparently were unable to produce enough fodder to meet the demand of the logging operations; both hay and oats were imported from the mainland. During periods of food shortages, the cattle were turned loose to forage for themselves. Under harsh winter conditions, Furst recalled that many animals starved, leaving the island littered with carcasses in the spring. 59

If they remained on the island, many farmers probably abandoned agriculture for a more reliable and lucrative income from the lumber camps. Some North Manitou families left their homes

⁵⁶ David L. Fritz, "Draft National Register of Historic Places Registration Form, "Swanson Barn," 22 September 1987, Sleeping Bear Dunes National Lakeshore, Empire, Mich.

⁵⁷ Robert T. Hatt, J. Van Tyne, L. C. Stuart, C. H. Pope, and A. B. Grobman, Island Life: A Study of the Land Vertebrates of the Islands of Eastern Lake Michigan (Bloomfield Hills, Mich.: Cranbrook Institute of Science, 1948), 43.

⁵⁸ Fritz, "History Data Report," 18, 86.

⁵⁹ Furst, My Point of View (n.p., 1992), 6.



Figure 3.7. The "Big Field" on North Manitou's western side, near the townsite of Crescent, ca. 1910. During the first two decades of the twentieth century much of the island's agricultural production supported intensive timber extraction.

and relocated to the lumber camps. Around 1909, John Anderson moved his family to Crescent, where they remained until the A. J. White lumber mill ceased operations. Peter Swanson probably did the same, although Swanson's son Enus remained on the island as an employee of Peter Stormer. Other farm families utilized logging jobs for supplemental cash income. Paul Maleski, Sr., worked at the lumber mills when he was a youth. Maleski also delivered mail between the eastern side of the island and Crescent "during the good old prime lumbering days." Throughout the era of second-growth logging, only the Maleski family and the Newhalls appear to have engaged primarily in commercial agriculture on the island. The Maleski farm by this time had evolved into an extensive beef cattle operation.

During the early decades of the twentieth century a rather fragmentary and insular local economy functioned on the island—one that remained somewhat disjoined from the larger economy in many ways. Glenn Furst recounted that his family's diet often lacked milk and fresh vegetables. Although they obtained eggs from a mixed flock of chickens, much of the family's food supply came from tin cans imported from the mainland. The 1910 federal census recorded only two farmers on North Manitou Island: Adam Maleski, and John L? Johnson. John Newhall (age 27) listed his occupation as fruit farm overseer. In addition to Maleski, Johnson,

Fritz, "History Data Report," 85; Rusco, North Maniton Island, 68-69.

⁶¹ Paul Maleski, Jr., interview by Betty L. Mann, 29 August 1984.

⁶² Furst, My Point of View, 5.

⁶³ U.S. Department of Commerce, Bureau of Census, "Thirteenth [1910] Census of the United States—Population," microfilm copy of manuscript schedules, Library of Michigan, Lansing.



Figure 3.8. Herman Prause posing with a cow on the Newhall farm, ca. 1900s. The Newhall farm was operated as a business, dependent upon a hierarchical managerial structure and a paid workforce. This type of commercial agriculture was developed even further by the Newhalls' successor, the Manitou Island Syndicate.

and Newhall, there were at least two farm laborers on North Manitou. It seems likely that they worked either for John Newhall, or the Smith & Hull lumber operation on the western side of the island.⁶⁴

Following the decline timber extraction during the late 1910s and early 1920s, a very different farm economy was evident on the island. Small-scale, privately owned farms had nearly disappeared from the island landscape, while larger farms operated by hired workers remained. In 1920 there were six "farm laborers" on the island; however, only two of them, John and Paul Maleski, were working on their "own account." Three others were wage workers. John O. Anderson was a salaried farm laborer, probably employed by Alvar and Mary Bournique. In addition, there were two salaried farm managers living on the island, Ralph Troats and Harrison Weaver. Troats lived with his wife Mary and his twin daughters Louise and Luella (age four), while Weaver resided with his wife Mary Jane. 65 At least one of these men, if not both, probably was working for the Manitou Island Syndicate. The 1920 census reflects the demographic change that occurred in the wake of the second logging boom: with the exception of the Maleskis, the island's independent farming families had abandoned their small North Manitou farmsteads. Many had departed in search of other economic opportunities on the mainland. Those who remained turned to other vocations, or found employment as farm laborers. North Manitou agriculture was dominated thence by a single, corporate land owner.

The Ascendancy of Corporate Farming

The trend toward large-scale farms owned by absentee proprietors and operated by professional managers and wage laborers, entered a new phase when the Newhalls' operation passed into the control of the group of Chicago investors known as the Manitou Island Syndicate (figure 3.8). As suggested in the previous chapter, it seems

⁶⁴ U.S. Department of Commerce, Bureau of Census, "Thirteenth [1910] Census of the United States—Population." The census manuscripts examined by the authors are very difficult to read. Only two individuals identified as farm laborers were distinguished: Charlie Johnson and? Johnson.

⁶⁵ U. S. Department of Commerce, Bureau of Census, "Fourteenth [1920] Census of the United States—Population," microfilm copy of manuscript schedules, State Historical Society of Wisconsin, Madison.

possible, if not likely, that the syndicate initially did not acquire its North Manitou real estate assets for the express purpose of turning them into a profit-making business venture. Hollister states that the syndicate initially formed from the group of investors who held the mortgage for the Newhalls' island property.66 Fritz states that the syndicate initially supported the Crescent lumber operation, engaging in general agriculture, raising cattle, wheat, oats, rye, and potatoes during the late 1890s through the 1910s.67 With scant documentary evidence available, the origins, early composition, and purpose of the syndicate remain somewhat obscure. However, it appears as though the early 1920s was a formative time for the organization, during which the syndicate was reconfigured and transformed into a more pragmatic, operative business enterprise. Seminal events in this process were the restructuring of the organization under the aegis of the Manitou Island Association (MIA), and the arrival of William R. Angell in 1926. By the end of the decade, a highly structured system of agricultural management had become central to the operation of the MIA, and agricultural commodities, especially beef cattle and fruit, had become primary sources of income.

The principal source documenting this transition is an MIA accounts ledger book for the period September 1924 through December 1929. The ledger provides a glimpse of the MIA's agricultural operations during the late 1920s, documenting expenditures for farm labor, and sales of dairy products, meat, and fruits and vegetables to MIA employees, other North Manitou residents, and external buyers. This single source certainly does not fully represent the MIA's farming activities during 1925-1929. For example, other sources suggest that apple cultivation and cattle raising were more important activities than the account book indicates. 68 Information documenting these two activities is certainly incomplete. In one instance, the book shows that the MIA incurred an expense for "labor for driving cattle" during autumn 1924; however, the ledger does not record any income from the sale of cattle that year. Likewise, the account book shows large expenditures of labor for the apple orchard, but little income in return. Most of the apple sales recorded in the ledger are small transactions involving islanders and MIA shareholders. Other sources, however, confirm that the MIA shipped large quantities of apples from the island during this period.69 The ledger references other separate account books, such as a "day book" and a "cherry book," and it seems likely that vital information about many of the MIA's various business ventures are lost with these documents. Nonetheless, the account book is an extremely valuable and useful source for assessing the MIA's farming operations on the island during the late 1920s.

The late 1920s seems to have been a formative period for the MIA, during which the organization honed its business operation to maximize profits. The overall pattern of transactions suggests that the MIA's operations moved from a diversified farming enter-

⁶⁶ Hollister, "Summer Resort."

⁶⁷ Fritz, "History Data Report," 71. Fritz's sources are interviews with Paul Maleski, letters from Giles E. Merritt, and NPS land acquisition files.

⁶⁸ Giles E. Merritt, untitled manuscript, 11 February 1986, Sleeping Bear Dunes National Lakeshore, Empire, Mich.; Giles E. Merritt, "U.S. Coast Guard N. Manitou Isl. Events 1925-28," 26 August 1991, Sleeping Bear Dunes National Lakeshore, Empire, Mich.; Vera Crites Goos, interview by Betty L. Mann, 15 and 18 June 1993, audio recording on file at the Leelanau Historical Museum, Leland, Mich.; Paul Maleski, Jr., interview by Betty L. Mann, 29 August 1984. audio tape recording on file at Leelanau Historical Museum, Leland, Michigan.

⁶⁹ Giles E. Merritt, untitled manuscript, 11 February 1986; Vera Crites Goos, interview.



Figure 3.9. The partially-finished MIA barn at North Manitou Village, 1927. The completed barn housed the MIA dairy herd, farm equipment, hay, a cold storage room for deer carcasses, and ventilated lofts for temporary storage of cherries. The debris in the foreground may be from demolished buildings formerly utilized by the Boardmans and Newhalls.

Figure 3.10 (below). Four members of the MIA barn construction crew, 1927. Most of the construction workers came to the island from the mainland, suggesting that the expertise required to build such a modern, specialized structure was unavailable locally.

prise in the mid-1920s to a strategy focused on cherry production by the end of the decade. In 1924, for example, the MIA maintained separate financial accounts under eleven different headings: apple orchard, cherry orchard, dairy, wood, fish, hog, ice, sugar bush, roads, tow boat, and "general farm" accounts. By 1929, the MIA no longer maintained separate accounts for hogs, tow boat, and fish, and the sugar bush transactions had become insignificant in terms of both expenditures and income. In contrast, the cherry orchards, which continued to expand in extent through this period, had become the MIA's greatest income producer by the end of the decade. In general, the MIA's labor force and the overall scale of its operation increased slightly throughout the period.⁷⁰

The MIA's agricultural operation extended across its vast land holdings on the island. Activities were concentrated at the locations of earlier farmsteads, where the association utilized the clearings and some of the buildings of the island's departed farmers. For example, the MIA utilized the clearings at the former Carlson and Alstrom/Stormer farms as hay fields.71 The entire operation was coordinated from the MIA's headquarters at North Manitou Village, where the association constructed a complex of barns and other support structures in 1927 (figures 3.9 and 3.10). The MIA used the cleared land north and east of the village farm complex for livestock pasture and field crops, including potatoes, corn and hay, and cherry and apple orchards. The MIA's east-side operation also included pigs, chickens, and a herd of dairy cattle, which was kept in fenced pastures near the village.72 The former Crescent/Peter Swanson farm functioned as a secondary node from which the association's managers coordinated activities on the western side of the island (figure 3.11). The "west side" operation also included several milk cows, chickens, hogs, several fruit trees, and fields of hay, corn, potatoes.73



Manitou Island Association Accounts Journal, , September 1924 - December 1929, MIA Collection, Sleeping Bear Dunes National Lakeshore, Empire, Mich.

⁷¹ Giles E. Merritt, untitled manuscript, 11 February 1986. Merritt was hired by the Manitou Island Syndicate in autumn 1925.

⁷² Fritz, "History Data Report," 22, 28; Fritz's source is Giles E. Merritt; Paul Maleski, Jr., interview by the authors, 26 July 1997.

⁷³ Giles E. Merritt, untitled manuscript, 11 February 1986.

Figure 3.11. Haystacks at Manitou Island Association west-side farm. The MIA coordinated its "west-side" agricultural operations from the abandoned Crescent townsite. The west-side farm utilized the former home of the Peter Swanson and John Swenson families, and two large clearings that previously had been farmed to support the draft animals and various labor crews associated with the Smith & Hull Lumber Company.



During at least the mid-1920s the MIA utilized the island's vast tracts of cut-over hardwood forests as free-range pastureland for beef cattle, by this time a long-standing management tradition common to all of the island's successive, large land owners. Documentary sources suggest that the association maintained a large herd on the island during this period. According to Giles Merritt, at least some of the herd consisted of purebred Black Angus.74 During the autumn of 1925, Merritt worked for the Manitou Island Association rounding up cattle to be shipped to Chicago. He recounted that the cattle roamed the woods at the northwestern end of the island, but rarely ventured to the village or to the west side farm. Occasionally, cattle would migrate to the MIA barns to be fed. In such instances the MIA farm manager would herd the cattle into a corral near the big village dock (figure 3.12). There the animals were fed, and provided with water from Lake Michigan. When the corral was full, the farm manager would "call the Syndicate." A steam ship would arrive several days later, and a truck was used to pull the cattle along the dock and load them onto the ship.75

Merritt's account of the MIA beef cattle operation was corroborated by Paul Maleski, Jr., who recalled that the cattle were shipped on a steamship called Rambler. Frank Reed may have coordinated the shipment of cattle for the MIA, for in 1926 the Association's cattle account received payment of \$4,455.82 for "two shipment cattle to Fr. Reed" in Chicago. In addition to Chicago, the MIA's cattle were shipped to local markets. In September 1926 the MIA incurred a \$32.00 "cash expense getting cattle to Provemont." This shipment may have been reported by the Leelanau Enterprise on September 16, 1926. During this period, beef production was part a larger, diversified production strategy that also included fruit cultivation. The Leelanau Enterprise reported on 15 October 1925, that John Kinnucan had transported two loads of cattle from the island in his scow, and that on one occasion he had

⁷⁴ Furst, My Point of View, 46; Giles E. Merritt, "U.S. Coast Guard N. Manitou Isl. Events 1925-28."

⁷⁵ Giles E. Merritt, "U.S. Coast Guard N. Manitou Isl. Events 1925-28."

⁷⁶ Paul Maleski, Jr., interview by the authors, 26 July 1997.

⁷⁷ Manitou Island Association Accounts Journal; Leelanau Enterprise, 16 September 1926. The MIA may have been a member of an organization variously mentioned in the accounts journal as the Provemont Co-operative Marketing Association or, simply, the "Provemont Farmers Association." The journal records several instances of cattle and apples being shipped to Provemont.



Figure 3.12. Cattle held at the Manitou Island Association corral near the village dock. During the 1920s the MIA continued the long-standing tradition of allowing beef cattle to freely graze the island's woodlands. Periodically, the roaming herds of cattle were corralled and detained near the village dock. The cattle were shipped via steamship to markets on the mainland or in Chicago.

returned to the island "with a cargo of baskets" which probably were used for harvesting and shipping apples from the MIA orchards.⁷⁸

After 1926 the MIA apparently abandoned the free-range cattle strategy. In 1925 the association earned \$4844.25 from the sale of beef, and another \$1,211.05 from the sale of a carload of beef cattle. In 1926 two shipments of cattle generated the income referenced above; however, there is no record of cattle shipments during 1927. An article published that year in the journal Michigan History quoted another observer who noted that "there has been an attempt at cattle ranching, and there was quite an exciting time last summer when they were trying to catch the cattle that had run wild. Apparently the long winter and inability to raise sufficient winter feed is against cattle-ranching." "79

The association's accounts ledger suggests that after 1927 the MIA raised only the number of livestock that could be maintained by the fenced pastureland at its village and west side farms. Revenue from pork and beef sales was no longer separated from other "farm" income, and transactions were made primarily with local island residents. As suggested by the 1927 Michigan History article, marginal profitability may have prompted MIA managers to discontinue free-range cattle husbandry. However, another factor

⁷⁸ Leelanau Enterprise, 15 October 1925. Kinnucan was the MIA farm manager from the mid-1920s until 1931.

⁷⁹ Marion Morse Davis, "A Romantic Chain of Islands," *Michigan History* 11(3): 352 (July 1927).

may have additionally influenced their decision—the arrival in 1926 of "nine small deer." The association's managers may have viewed island's roaming cattle as a needless hindrance to the establishment of a thriving white tail deer herd on the island. To reduce competition for food, the managers may have decided that Bos taurus should surrender its woodland habitat to Odocoileus virginianus. Whatever the reason for abandoning free-range cattle ranching, the MIA general accounts ledger suggests that the company discovered fruit cultivation to be a more lucrative production strategy during the late 1920s. Although the association's orchards produced apricots, plums, pears, and apples, its management strategy seemed to focus resources and attention on the production of sweet and tart cherries.

D. H. Day supposedly planted the lakeshore region's first commercial cherry orchard in the Glen Haven area during the 1890s, although small cherry orchards had been established elsewhere in the region before then.81 Day established a cannery at Glen Haven in 1923, and it may have been this event that prompted the Manitou Island Association to increase its cherry production. Cherry orchards already existed on the island by the time the MIA was organized. Rusco states that the Newhalls planted three tart cherry orchards and two sweet cherry orchards on their property sometime during their tenure on the island, perhaps as early as ca. 1900. A historic photograph at the Chicago Maritime Society indicates that the Newhalls planted a large cherry orchard on the island ca. 1910.82 Most likely, these orchards were producing crops of sweet cherries for the Manitou Island Syndicate during the early 1920s.83 The suitability of the island's soils and climate to cherry cultivation thus had been well-proven by the mid-1920s.

The MIA sold only small quantities of cherries to island residents and resorters during late July 1925. The accounts journal indicates that the MIA at that time was selling at least two varieties of sweet cherries, identified as "Bings" and "H. Sweets." In addition, the MIA was selling a variety referred to as "King," and a variety denoted as "Mont.," probably an abbreviation for "Montmorency," a variety of tart cherry. Large individual orders recorded in 1925 came from the Leland Mercantile, Dalton Bros., Alvar Bournique, and W. R. Angell, who purchased 49 crates, 150 pounds, 8 flats, and 40 "fancy boxes" of cherries. However, the largest shipment of cherries in 1925 may have been sent to D. H. Day's cannery—the accounts journal indicates that the MIA received \$536.96 from D. H. Day for cherries that year.

The MIA continued to sell small quantities of cherries to island residents and its members throughout 1925-1929. The proportion of the cherry crop that was exported from the island, however, appears to have risen dramatically during this period. Giles Merritt recalled that some of the cherries were packed in fifty-gallon oak barrels. These were shipped to Chicago where they were used for maraschino.⁸⁴ Merritt also recalled that some of the cherries were

⁸⁰ Leelanau Enterprise, 21 January 1926.

⁸¹ Haswell and Alanen, Garden Apart, 93.

⁸² Rusco, North Maniton Island, 57; John Newhall Collection, Chicago Maritime Society, Chicago, Ill.

⁸³ Furst, My Point of View, 83; Furst recounted that his family paid more frequent visits to the village when the sweet cherries there were ripening.

⁸⁴ Giles E. Merritt, untitled manuscript, 11 February 1986.

made into wine by the MIA farm manager, John Kinnucan. The "bootleg" cherry wine was stored in a root cellar constructed in 1927 near Tamarack Lake. Nevertheless, the vast majority of the island's cherry crop probably left the island for legitimate uses. During the 1928 season the MIA sold cherries to two firms—Cuneo Bros. and Wayne & Low. The general accounts ledger contains a single entry noting that \$3,646.59 worth of cherries had been sold to D. H. Day during the "cannary [sic] season 1929."

Like other parts of the Sleeping Bear Dunes Lakeshore region, the island's climate and soils were adequately suited to commercial cherry cultivation. However, North Manitou Island's climate may have been somewhat less favorable to cherry cultivation than other nearby locations. Because of its position in Lake Michigan, cherries on North Manitou ripened two weeks later than those on the mainland. The delayed island harvest was advantageous in years when demand outstripped supply because cherries that arrived on the market later could take advantage of high prices. Conversely, when supply grossly outstripped the demand for cherries, the island's later harvest time was a significant liability. Even when supplies were adequate to meet demands, the later harvest time meant that the island's cherries entered the marketplace precisely when the market price was at its lowest. The island's geographic position also exposed its cherry crops to greater risk from weather damage because storms hit the island earlier and with greater intensity than when they arrived on the mainland.87 Nevertheless, despite the potential risks, the initial success of its cherry business may have prompted the MIA to expand its orchards during at least one season between 1925 and 1929-in March 1929 the MIA purchased an unspecified number of cherry trees from "B & H Nurseries" for \$495.00.

Apples were the other staple of the MIA's fruit business. As previously noted, apple sales probably generated more revenue than the 1925-1929 MIA general account ledger indicates. The MIA began selling apples to island residents each season during the end of August. In 1925 the MIA paid a \$19.96 charge for "draying apples to Provemont." That year the MIA also shipped a large quantity of apples to "Wayne & Low," a firm that later purchased a significant quantity of cherries in 1928. Giles Merritt recalled that apples were shipped by scow to Leland. From there they were transported to warehouses in Leland, Suttons Bay, Lake Leelanau, and Traverse City.88 Only two apple varieties, Spy and Wagner, are identified in the MIA ledger by name. In addition to apples, the MIA sold pears, plums, and crab apples. The association probably utilized the orchards that had been planted by Frederic Beuham and Stark Bros. during the late 1880s and early 1890s, with possible later additions by the Newhalls. There is no indication that the MIA expanded the acreage devoted to any fruit other than cherries during the 1920s.

⁸⁵ Giles E. Merritt, "U.S. Coast Guard N. Manitou Isl. Events 1925-28."

⁸⁶ Manitou Island Association Accounts Journal.

⁸⁷ Rusco, North Manitou Island, 37; Myron H. Ross and Robert A. Steadman], "Preliminary Report of Commission," United States of America V. Security Trust Company, et al and Unknown Owners; Detroit Bank and Trust Company, Trustee, et al, and Unknown Owners, U.S. District Court for the Western District of Michigan, Southern Division, filed 23 February 1983, Angell Foundation Collection, Sleeping Bear Dunes National Lakeshore, Empire, Mich. Even today, cherry growing is a risky endeavor, with annual yields of the extremely perishable fruits contingent on weather events, and profits dependent on fluctuating market demand. A single storm occurring during the cherry harvest can completely ruin an excellent crop.

⁸⁸ Giles E. Merritt, untitled manuscript, 11 February 1986.

Figure 3.13. Louis Halsted collecting maple sap for the Manitou Island Association, ca. 1928. The MIA attempted to turn traditional island subsistence activities, such as fishing, fuel-wood cutting, and maple syrup making, into profitable ventures. Seasonal activities such as wood cutting and syrup making provided much-welcomed winter employment opportunities for the island's residents. Like Louis Halsted, several members of the MIA's winter work crews also were employees of the North Manitou Island U.S. Coast Guard Station during this period.

Outside of cattle husbandry and fruit cultivation, the Manitou Island Association's endeavors were of considerably less pecuniary importance during the late 1920s. The association intermittently engaged in commercial fishing, which netted a modest profit of \$428.41 in 1925. Cordwood proved to be a more steady and reliable source of revenue, however. The MIA sold wood to the U.S. Coast Guard station and the North Manitou school district, as well as to MIA employees and other island residents. Ice was another commodity for which the MIA found a local market. Ice was harvested from Lake Manitou and, after 1927, stored in the MIA's barn near the village. 89 The association's principal clients for ice were the U.S. Coast Guard, Katie Shepard, and Alvar Bournique.⁹⁰ No doubt MIA members, including Roger Sherman, George McConnell, Frank Reed, and William Angell, availed themselves of the ice when they visited their island cottages during the summer months. Wood cutting and ice harvesting occupied the association's work crews during much of the winter.

Another seasonal activity was the operation of a sugar bush located southeast of the Maleski farm (figure 3.13).⁹¹ Sugar production may have been erratic during the late 1920s due to weather or other factors. During 1925 the MIA sold a total of 73 gallons of

⁸⁹ Fritz, "History Data Report," 25.

Manitou Island Association Accounts Journal.

⁹¹ Fritz, "History Data Report, 24; Fritz's source was Giles E. Merritt.

maple syrup. F. M. Reed, Roger Sherman, A. A. Murray, John McConnell, Mrs. F. L. M. McComber, and W. R. Angell purchased significant quantities of syrup; Sherman alone purchased 22 gallons of maple syrup during 1925. Thus, the MIA adapted another traditional subsistence activity to commercial production.

A "Company Island"

Throughout the 1920s and 1930s, the Maleski family remained the Manitou Island Association's only competitor for the modest, local agricultural commodities market. After being forced to abandon large-scale beef production during the 1910s, the Maleski's returned to more a diversified "general farming" strategy. The Maleskis still raised beef cattle, although the herd was limited to the number of animals that could be supported on the family's acreage. The Maleskis developed a large garden at their farmstead and, with a 1921 Model T Ford that Paul Maleski, Sr. purchased in 1928, delivered fresh vegetables to employees of the MIA and the U.S. Coast Guard, Cottage Row residents, and Katie Shepard's summer hotel. Paul Maleski, Jr., recalled that the family sold "carrots, cucumbers, sweet corn, onions, beans, 'baggies' [rutabagas], peas, beets, potatoes, and parsnips." The Maleski's market garden was severely threatened by the explosive increase in the deer herd introduced by the MIA, and the family was forced to enclose their garden plot with a tall wire fence.

Like the MIA, the Maleskis also produced maple syrup from a sugar house that was located on their farm. Paul Maleski, Jr., recalled that his father sold their maple syrup for one dollar per gallon, which was exactly half the price for which the MIA sold its syrup. 92 Despite the somewhat adversarial relationship that existed between the Manitou Island Association and the Maleskis, family members nonetheless obtained seasonal employment from the association. Paul Maleski, Jr., worked for two summers milking the MIA's nine cows twice per day, tending calves, cleaning the barn, and hoeing corn on the eastern side of the island. Paul and the other Maleski children also worked for "the company" during the cherry harvests. 93 Working for the MIA was an important source of cash income on an island that offered few opportunities for wage work.

The general accounts ledger suggests the extent to which the Manitou Island Association controlled the relatively closed economic system that existed on North Manitou Island during the 1920s. The association dominated the local labor market, with the MIA's core workforce consisting of eight to ten men during the 1925-1929 period. Of these, only two men, John L. Kinnucan and Tracy Grosvenor, Sr., received a fixed monthly salary during the entire period. Kinnucan, the MIA's highest-paid employee, managed the association's business operations, and Grosvenor piloted the boat between the island and the mainland. A step below Kinnucan on the pay scale were Peter Oien, Jessie Smith, and John Maleski, all

⁹² Paul Maleski, Jr., interview by the authors, 26 July 1997.

⁹³ Manitou Island Association Accounts Journal; Paul Maleski, Jr., interview by the authors, 26 July 1997.

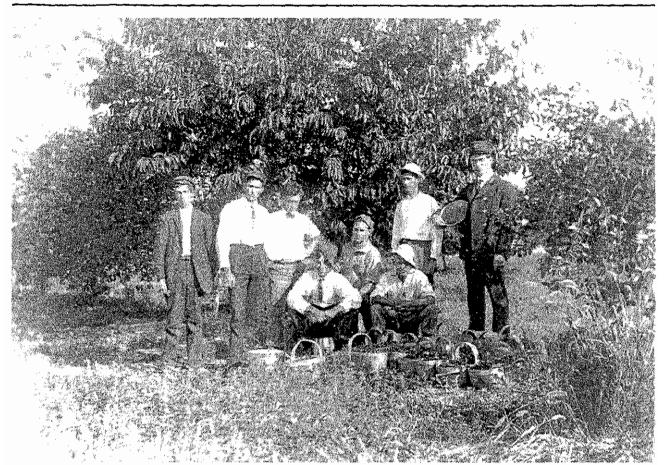


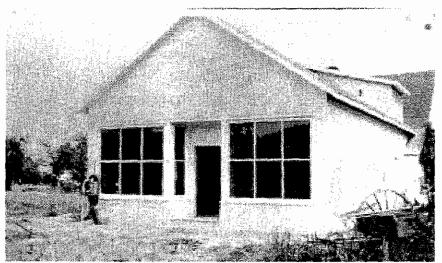
Figure 3.14. Orchard workers, ca. 1928. During the 1920s the MIA hired many island residents; including several women and children, to harvest the association's crops of sweet and tart cherries. Workers were paid on a per-pound-picked basis.

of whom supervised various aspects of the MIA's agricultural enterprise. The remaining men were laborers working at various chores. Their monthly pay was calculated on a daily or hourly basis. In addition to this core workforce, the MIA hired extra workers—mostly island residents—from time to time throughout the year.⁹⁴

The annual cherry harvest was the MIA's most labor-intensive seasonal task (figure 3.14).95 The association hired additional workers each year during the cherry picking season in early August. Many of these seasonal employees were women and children, all of whom were paid according to the number of pounds they picked. As revealed by the MIA accounts, the labor force required for cherry harvests grew progressively larger. During 1925 the MIA employed twenty-four persons. In 1926 the association hired 37 cherry pickers, most of whom appear to be familial relatives of other MIA workers and North Manitou residents. The 1927 cherry picking crew consisted of 49 persons; more than half were women, and at least eight were children. The 1928 cherry picking crew consisted of 37 workers, at least 22 of them women, and at least six children; in August of that year another crew of sixteen women and two men were employed "thinning apples." The 1929 cherry harvest crew consisted of 57 workers, including at least 35 women; they picked a total of 60,519 pounds of cherries, and each was paid \$0.0125 per pound for their labor. By 1929, the MIA's roster of regular employees had increased to fifty-five names. The list included nine women,

⁹⁴ Manitou Island Association, Accounts Journal.

⁹⁵ Mechanical cherry harvesters were invented after the Manitou Island Association ceased cherry production in 1955.



most of whom were employed during the month of October, probably harvesting or packing apples. Fig. The MIA used its control of the labor market to generate additional revenue by selling the service of its employees and draft animals to other island residents. Katie Shepard, Nicholas Feilen, Paul Maleski, Sr., and Alvar Bournique all used MIA farm laborers to accomplish various chores. Bournique and Shepard were the most frequent patrons of MIA farm labor.

The Manitou Island Association not only dominated the island labor market, but also controlled other aspects of the local economy. MIA Employees returned substantial portions of their monthly earnings to the association through purchases of dairy products, meat, fruits and vegetables, wood, and prepared meals. Most, if not all, of the dairy products, pork, wood, and ice produced by the MIA were sold back to the company's employees or to other island residents. Only cattle, beef, apples, cherries, maple syrup, and fish were exported in significant quantities from the island to purchasers in Leland, Traverse City, Provemont, and Chicago. 97

During autumn 1925 the MIA stocked its newly-constructed company store. After 1925, eggs, butter, beef and pork-commodities which previously had been sold directly to employees and island residents—were conveyed through the store (figure 3.15). Development of the store gave the MIA a near monopoly on grocery goods, many of which were imported from external sources. Although the store strengthened the MIA's position in the island economy, it also helped integrate North Manitou with the larger national economy. Commodities that previously had been produced on the island now faced competition from national, mass-produced goods. By 1926 the MIA store was procuring butter from "Hansen Bros.," and eggs from "Plamonda & Belanger." The store routinely acquired items from the Detroit Bakery Co., and the "National Groc. Co." In 1927 the store purchased 222 pounds of pork and 543 pounds of beef from an outside source, and meats from Swift & Co. In 1928 a single meat order from Swift & Co. totaled \$828.28. Accordingly, the

Figure 3.15. Manitou Island Association store, 1925. The activities of the MIA contributed to the evolution of a modern cash economy on the island during the 1920s and 1930s, a system that became more circular yet increasingly linked with the larger national economy. For example, after 1925 the MIA imported staples such as meat, eggs, and butter from mainland suppliers and in turn sold them to its employees and other islanders through the "company store." The Manitou Island Association store gave island residents direct access to ready-to-eat grocery items. and various mass-produced or manufactured goods, but it also imparted even greater control of the island economy to the MIA.

[%] The MIA maintained separate rosters for cherry harvest crews and other itinerant employees.

⁹⁷ Manitou Island Association Accounts Journal.

MIA's production of commodities such as butter, eggs, and meat appears to have declined after 1926.98

Oral accounts suggest that the Manitou Island Association's general pattern of agricultural production, which emphasized cherry and apple cultivation, continued through the 1930s. In fact, by the early 1930s the MIA probably had become dependent on a successful cherry crop for its profitability. Rusco states that the association suffered a financial loss during 1931-32 due to the low price offered for the island cherries. She notes that the MIA cherry orchards went unharvested for at least one season. 99 The island's apple crop may have been a more dependable source of revenue during this period. According to Vera Crites Goos, who lived on North Manitou Island during the late 1930s, William Angell used the apples as special gifts. The MIA hired Goos and other island residents to pack Christmas gift boxes for Mr. Angell's personal friends and business associates. Goos remembered packing each box with approximately one peck of hand-polished red and green apples, maple syrup, and red and green jellies.100

MIA Production Takes a New Direction

Beginning in the 1930s, the MIA's fruit sales were augmented by revenue generated from a new commodity—venison. Within a decade after it was introduced, the North Manitou deer herd had increased to a population that was large enough to sustain hunting. The MIA had purchased the original animals from a licensed deer breeder, probably William G. Mather's Cleveland-Cliffs Iron Company, headquartered in Ishpeming, Michigan, which was managing an introduced deer population on Grand Island in Lake Superior. The North Manitou deer were thus the exclusive property of the Manitou Island Association. Unlike wild deer, which were the property of the State of Michigan, the MIA's deer were not subject to state hunting restrictions. The animals could be "harvested" by the MIA at any time, in any manner. The association's deer thus had the status of domestic livestock.

The MIA's policy was "to manage the herd to obtain the greatest possible return from the largest number of deer that can be maintained on the island." Sometime during the late 1920s or 1930s the MIA acquired hunting rights to the few island properties that it did not own. The association also obtained a state breeder's license, allowing the association to manage the deer herd as a profit-making business venture. The Association began artificial feeding to help the deer through the winter of 1937-38. Thereafter, winter feeding was an annual activity that utilized alfalfa and oats raised on the island. Around the same time, the MIA began using the island's apple crop as additional deer feed. The first hunt, which occurred in 1937, yielded eighteen animals. Deer hunts were largely the exclusive privilege of the MIA's invited guests. The island's deer were hunted not only for sport, however; the animals were harvested

⁹⁸ Ibid.

⁹⁹ Rusco, North Manitou Island, 18.

¹⁰⁰ Vera Crites Goos, interview by Betty L. Mann, 15 and 18 June 1993.

¹⁰¹ I. H. Bartlett, "North Manitou Island's Deer Herd," *Michigan Conserva*tion, September 1944, 10.

¹⁰² Edgar McKee, "North Manitou Island 1937-1942," n.d. [ca. 1992], Sleeping Bear Dunes National Lakeshore, Empire, Mich. McKee was MIA business manager during 1937-1942.

¹⁰³ McKee, "North Manitou Island 1937-1942;" Jean Lundquist, interview by Eric MacDonald, Leland, Mich., 27 June 1999, notes filed at Sleeping Bear Dunes National Lakeshore, Empire, Mich.

systematically by MIA employees, and the flesh sold to external markets as distant as New York City. The venture thus had a quasi-agricultural nature. The entire island landscape effectively functioned as a vast ranch where white tailed deer were the husbanded livestock, and venison flesh was the marketable commodity. According Edgar McKee, the added income from deer hunts turned "a very costly hobby into a very profitable business." McKee also noted that the MIA's fruit sales also expanded considerably during his 1937-1942 tenure as island manager. 105

The Manitou Island Association apparently achieved pecuniary success despite the virtually complete disintegration of the rest of the island community during the 1930s. The island lost a substantial portion of its population following closure of the U.S. government light house and Coast Guard Station in 1933. Depopulation deprived the Association of a substantial portion of its labor force, as well as a local, albeit small, market for meat and dairy products. By the mid-1930s the MIA was forced to hire migrant workers to replace the island's resident labor force during the fruit harvests. During the 1930s, the orchard work crews consisted mostly of American Indians who came to the island from communities on the mainland. Rita Hadra Rusco recalled that the migrant workers, totaling sixty to seventy people for the 1942 cherry harvest, came from Alabama, Arkansas, Missouri, and Tennessee. During World War II migrant farm labor was scarce, prompting the association to import labor from outside of the country. In 1943 and 1944 the MIA imported about fifty male workers from Jamaica. They were housed in the pickers' cabins and ate meals in a cookhouse located near the MIA sawmill. During the 1945 and 1946 seasons workers came from Mexico. Jean Lundquist recalled that for three seasons during the 1940s, workers came from the Boys Club of Detroit, a charity that Angell supported. 106

Decline of MIA Agriculture

Following the death of William Angell in 1950, ultimate decision-making authority over the MIA's operation passed from a single individual to the board of the Angell Foundation. A local historian noted in 1951 that "fruit culture is still one of the main activities of the island." She noted that during the summer Tracy Grosvenor transported the entire harvest of cherries and the cherry pickers. 107 Four years later, however, cherry production ceased on North Manitou. The trees were well past their productive peak by then. A total of approximately 100 acres had been devoted to cherry production on the island from the mid-1920s to 1955. 108 The foundation board scaled back the MIA's agricultural activities, and concentrated on managing the island as an exclusive hunting and fishing resort. With the exception of the orchards and deer feeding program, the MIA's agricultural endeavors were discontinued. According to Rusco, during the mid-1950s, the foundation also abandoned

- 104 Rusco, North Manitou Island, 43.
- ¹⁰⁵ McKee, "North Manitou Island 1937-1942."
- Lundquist, interview; Rusco, North Manitou Island, 22-23, 89-91.
- ¹⁰⁷ Julia Terry Dickinson, The Story of Leelanau (Omena, Mich.: Solle's Bookshop, 1951), 45.
- 108 [Charles Brown] "Preliminary Report of Chairman of Commission After Taking Additional Testimony, Re: North Manitou Island." United States of America V. Security Trust Company, et al and Unknown Owners; Detroit Bank and Trust Company, Trustee, et al, and Unknown Owners, U. S. District Court for the Western District of Michigan, Southern Division, 18 January 1983, Angell Foundation Collection, Sleeping Bear Dunes National Lakeshore, Empire, Mich.; [Myron H. Ross and Robert A. Steadman]. "Preliminary Report of Commission." According to testimony taken during the condemnation hearings for North Manitou Island, the life-span of a cherry orchard was estimated to be 27 years. The young trees begin to bear fruit when they are 7-9 years old, and thereafter produce cherries for approximately twenty years before declining.

Figure 3.16. Maple syrup label, ca. 1960s. The Manitou Island Association produced maple syrup on North Manitou during the 1920s, but may have abandoned the practice after much of the island's resident labor force left the island during the early 1930s. Contemporary accounts suggest that the MIA again sold syrup under its own label during the 1960s and early 1970s. It seems plausible that the association, which sought to bolster its sport hunting and fishing business during this time, packaged the syrup for sale to sportsmen as souvenirs of their visit to the island.



the fields that had been planted with alfalfa and oats for deer forage, and began importing feed exclusively from mainland sources. A 1958 newspaper article about North Manitou Island noted that "farms are deserted, large cherry and apple orchards have outlived their usefulness." 109

Although the "long-time practice of producing maple syrup" on the island also ended during the 1950s if not earlier, the foundation may have revived maple sugar production several years later. 110 The Betty Kramer Collection of the Leelanau Historical Museum contains a syrup packaging label from ca. 1960 (figure 3.16). In the late-1960s, an article published in the hunting and fishing magazine Outdoor Life noted that "in addition to game, North Manitou produces some excellent maple syrup." However, the Betty Kramer Collection also contains another, redesigned, label from ca. 1971 that indicates that the product was "packed for Manitou Island Association," suggesting that the syrup may not have been made on the island. Whether it was produced on the island or not, the foundation clearly did not view maple syrup, or any of its other traditional products, as the focus of its business.

After 1955 the MIA's principal commodity was venison. This change certainly reflected the foundation board's desire to streamline the operation of the MIA, although the shift in emphasis may have begun a decade earlier. In 1944 one observer noted that the association's apple orchards had "not been worked extensively during the last year or two." Under the MIA's management program the

¹⁰⁹ "Folk on North Manitou Island Use Absentee Voter Ballots," Muskegon Chronicle, 8 October 1958.

¹¹⁰ Rusco, North Manitou Island, 131; Jean Lundquist recalled that during the 1940s, the MIA operated a sugar bush located west of the schoolhouse and south cherry orchards. The syrup was packaged and sold to island visitors, but otherwise it was not marketed commercially.

¹¹¹ G. Howard Gillelan, "Bowhunter's Paradise," *Outdoor Life*, (n.d., ca. 1966 or 1967), 20-?

¹¹² I. H. Bartlett, The North Manitou Island Deer Herd: A History and Suggested Management Plan (Lansing: Deer Investigations, Game Division, Department of Conservation, 4 February 1944), 3. island deer population rose dramatically. In 1943, just six years after the island's first deer hunt, at least 256 deer were "harvested." 113

In the mid-1940s the MIA worked with Ilo H. Bartlett, a Michigan Department of Conservation wildlife biologist, to develop a management plan for the herd. Bartlett speculated that the island herd may have been as large as 1500 animals in 1944. On one occasion Bartlett counted 250 individuals in a single field. Bartlett recommended that the MIA maintain the island deer herd near 1600 animals, or 70 to 75 animals per square mile. This would provide the association with a sustained annual "take" of about 400 animals. He developed two game management plans, one "conservative," the other "liberal." The conservative plan reduced the herd to the carrying capacity of the island's natural winter food supply. Thereafter, the MIA would manipulate sex ratios so that the maximum fawn production would assure the "maximum harvestable crop." The liberal plan was to be implemented if the income from the deer herd justified artificial feeding. The herd was to be increased in line with income and costs, and as long as the herd remained healthy. Because the danger of epidemics and parasite infestations increased with the larger population, facilities were required to quickly remove large numbers of deer before natural losses became serious.114

Apparently implementing Bartlett's "liberal" management strategy, the MIA continued artificial feeding of the deer herd. During the 1940s and 1950s, supplemental forage was placed in wooden cherry boxes, or "lugs," which were scattered throughout the island. These were later replaced by a smaller number of large feed troughs. During the 1950s at least, it is questionable whether artificial feeding was economically viable, since in 1956 the foundation revived logging on the island in order to off-set the cost of the deer feeding program. Perhaps in a further attempt to reduce costs, the MIA developed a special food pellet from a cereal byproduct made by the Kellogg Company in Battle Creek, Michigan. The pellets were distributed among the island feeding station by tractor and, later, by snowmobile.

By the mid-1960s about 300 deer were harvested annually from what was touted as "the only licensed deer farm in Michigan." During the 1965 season, hunters took 161 deer and the MIA harvested an additional 135 animals for the venison market. Although the MIA lodge served venison steaks for breakfast, the association sold most of the meat to a commercial venison purveyor. During the 1970s the MIA sold venison to a supermarket in Traverse City. The last deer hunt organized by the MIA occurred during the 1977-78 season and yielded a harvest of 507 animals. The herd also was last supplementally fed in 1977-78, though not as heavily as previously. A newspaper article reported that during 1978 and 1979 the MIA attempted to reduce the island herd to 150

- ¹¹³ Bartlett, North Manitou Island Deer Herd, 11.
- ¹¹⁴ Bartlett, North Manitou Island Deer Herd, 5-11.
- 115 Gordon Charles, "Swiss Family
 Manitou," Detroit News Magazine, 23
 March 1980, 34-36; 38.
- ¹¹⁶ Bartlett, North Manitou Island Deer Herd.
- 117 Lundquist, interview.
- 118 "Deer Hunting Ends on North Manitou," Leelanau Enterprise, 8 December 1960, n.p.
- 119 Gillelan, "Bowhunter's Paradise."
- 120 Gordon Charles, "Swiss Family Manitou."
- ¹²¹ Dale R. McCullough and David J. Case, "The White-tailed Deer of North Manitou Island, Michigan" (Empire, Mich.: Sleeping Bear Dunes National Lakeshore, National Park Service, 13 August 1982), 13.

animals in anticipation of condemnation of the island by the National Park Service. 122

Requiem for the Cultivated Wilderness

The story of agriculture on North Manitou closes with the discontinuance of the Manitou Island Association "deer farm." However, during the lengthy court proceedings that extended through the early 1980s, the island's agricultural history was exploited by the Angell Foundation in its argument for greater compensation from the National Park Service. After the National Park Service's initial offer was refused by the foundation, a federal court appointed a threemember commission to determine the island's market value. The commission was unable to reach consensus. Two members favored the \$9.2 million purchase price presented by the federal government, while one member sided with the foundation's estimate of \$19.2 million. The government's price was based on utilizing the island for recreation, while the foundation eventually focused its estimate on converting much of the island into a large-scale cherry production operation. 123 The foundation objected to the majority opinion of the commission, questioning the commission's interpretation of the island's timber and cherry production potential. 124

To bolster its case for a higher real estate valuation, the foundation hired a private consultant, Paul Scott, to prepare a feasibility study for producing cherries on the island. The foundation's proposal called for the development of cherry orchards on approximately 7,500 acres of land in the island's interior. This acreage was to be divided among ten 1,000-acre farms, which would be cleared and planted over a ten year period. Scott included the cost of a packing plant and dock in his computations. In addition, each farmer was to contribute \$2 million toward the construction of a \$20 million processing plant. The study compared the cost of producing cherries on the island versus the mainland.

During court proceedings, Scott testified that a pound of cherries could be produced on North Manitou Island cheaper than a pound of cherries on the mainland. 126 Countering Scott's testimony, the government's expert witness, Myron Kelsey, claimed that the production costs would be equal on both sides of the Manitou Passage. 127 The crucial factor in determining the economic feasibility of the foundation's scheme was the initial cost of developing the ten cherry farms. Approximately 70-75 per cent of the acreage would have to be cleared of timber in order for cherry production to take place. One of the government appraisers concluded that "no value should be assigned to the growing of cherries on the interior land of the island." The commission ultimately determined that the interior land could not be economically used for agriculture, and concluding that the highest and best use of the island was for recreation. 128 After five years of litigation, the purchase price for the island was ultimately set in September 1983 when U.S. District

¹²² Gordon Charles, "Swiss Family Manitou."

¹²³ "Judge to Decide Value of North Manitou Island," *Traverse City Record Eagle*, 23 May 1983, 3.

^{124 &}quot;Defendant's Objections to Preliminary Report of Commission (Majority)," United States of America V. Security Trust Company, et al. and Unknown Owners; Detroit Bank and Trust Company, Trustee, et al, and Unknown Owners, U. S. District Court for the Western District of Michigan, Southern Division, dated and served 14 February 1983, Angell Foundation Collection, Sleeping Bear Dunes National Lakeshore, Empire, Mich.

¹²⁵ [Myron H. Ross and Robert A. Steadman], "Preliminary Report of Commission."

^{126 &}quot;Defendant's Objections to Preliminary Report of Commission (Majority)."

¹²⁷ Ibid.

¹²⁸ [Myron H. Ross and Robert A. Steadman], "Preliminary Report of Commission."

Judge Noel B. Fox set the final figure at \$12.2 million. ¹²⁹ The judge determined that the foundation's cherry orchard scheme was not feasible. ¹³⁰ The matter was finally settled in June 1984, clearing the way for the National Park Service to implement its own vision of a "comfortable wilderness." ¹³¹

An Assessment of Agriculture on North Manitou

Agriculture on North Manitou Island did not follow a clear, linear progression from pre-technic practices to small, subsistence farms to large, corporate enterprises catering to national and international markets. Nevertheless, the scale of agricultural activity on the island certainly reflected this continuum, and several historical events can be associated with the general pattern suggested by Mumford's and Dandekar and Schoof's models. As noted in the previous chapter, archaeological evidence suggests that aboriginal agriculture was not practiced on North Manitou Island, and possibly was not prevalent in any portion of the national lakeshore, at least during prehistoric times. The history of agriculture on North Manitou Island thus lacks a significant "pre-technic" phase.

Eotechnic practices may have impacted the island as early as the mid-1840s, and during certain periods the scale of eotechnic agriculture on North Manitou Island was atypical within the lakeshore region. Eotechnic strategies persisted well into the midtwentieth century, coexisting on the island with paleotechnic and neotechnic enterprises. Furthermore, paleotechnic practices emerged almost simultaneously with neotechnic agriculture, which achieved its most highly evolved manifestation on North Manitou Island: no other historic agricultural enterprise within the current boundaries of the national lakeshore represents the distinctive production and managerial strategies of neotechnic agriculture better than the farming operation of the Manitou Island Syndicate and its later incarnation, the Manitou Island Association.

Agriculture was practiced on North Manitou Island for nearly a century. During that time the scale and intensity of agricultural activities varied greatly. It is difficult to assess the role of agriculture in shaping the island landscape without also considering the other types of human activities that concurrently produced changes. Logging certainly was the most intensive and extensive human industry on the island (figure 3.17). The island's forests were harvested more-or-less continually over a period of 150 years, with shorter periods of intensive logging that dramatically altering the ecological and aesthetic character of the landscape. Other activities, such as fishing and recreation tourism, also had an impact on the environment.

Agriculture functioned in tandem with these other enterprises. Few families made their living primarily from farming, at least for more than a short period. In fact, many islanders pursued a combination of these activities for subsistence. Agricultural products found

Fritz, "History Data Report," 38.
 "\$11 million-plus Price Tag Is Set by Judge as Value of North Manitou

Judge as Value of North Manitou Island Property," Leelanau Enterprise and Tribune, 22 September 1983, 1.

Dale W. Rhoades to Wilbur H. Davis, Blake Forslund, William M. Skillman, Clifford H. Higgins and Avery Wing, 5 June 1984, Angell Foundation Collection, Sleeping Bear Dunes National Lakeshore, Empire, Mich.

Figure 3.17. The impact of logging on the landscape of North Manitou Island certainly was more extensive than agriculture. Yet the these two human endeavors often functioned in tandem.



markets in the lumber camps, among summer tourists and recreationists, and in the U.S. Coast Guard Station and lighthouse. Such local markets were vital, as transporting commodities from the island became increasingly costly and difficult during the twentieth century.

Together, the stories of the Maleski family and the Manitou Island Association encapsulate much of the history of agriculture on North Manitou Island. Each story contains the essential pattern that characterized agriculture on the island: small-scale, subsistence agriculture coexisting with extensive, commercial agriculture. Although the intensity of activities and the identities of proprietors changed, both types of agriculture functioned on the island for approximately a century. With the exception of the Maleskis' relatively short-lived beef cattle venture, none of the island's small, independent farms significantly evolved beyond subsistence agriculture. None progressed to Mumford's "neotechnic" phase—even the Maleski farm never used automated farm machinery, but instead relied exclusively on draft animals throughout its history. 132 It thus existed on the borderline between Mumford's paleotechnic and eotechnic forms of agriculture. The island's various large-scale farms, however, were of two types: "subsistence" operations that functioned to support timber extraction, and commercial ventures that were financed largely by outside capital. In both cases, these large-scale farms tended to be controlled by absentee landowners, administered by professional managers, and operated by paid farm laborers.

Like other patterns of human activity on North Manitou Island, modes of agricultural production were affected greatly by the

¹³² Paul Maleski, Jr., interview with the authors, 26 July 1997.

island's peculiar "boom-or-bust" economic cycles. Human settlement on the island never constituted a sufficiently large or dependable local market for agricultural commodities. Except during periods of extensive logging, the island's population was too small, by itself, to support commercial agriculture. Construction of the U.S. Life-Saving Service Station provided the island with a meager non-farm population, as did development of the Cottage Row summer resort; none-theless, the local economy remained too insignificant to support more than one or two market gardeners. When the island population swelled during times of logging activity, company-owned farms monopolized much of the local market for meat, dairy products, fruits and vegetables, and livestock fodder.

Because there was no local market for cash crops, independent farmers were faced with the problem of transporting cash crops to distant markets, a dilemma faced by any agriculturist engaging in commercial agriculture, but one that was even more vexing for islanders. The island's early transportation advantage vanished as coal-fueled steamers replaced wood-burning vessels on the lakes, and railroads were developed on the mainland. Transporting commodities to mainland markets became increasingly costly and difficult during the nineteenth and twentieth centuries. Lack of a natural harbor made it more difficult to dock and harbor ships. A serviceable dock represented a substantial infrastructure investment that only wealthy individuals such as Nicholas Pickard and Silas Boardman could afford. Furthermore, the island was seasonally inaccessible during early winter and early spring when the ice was breaking up (figure 3.18). Vera Crites Goos recalled that in 1936 islanders were iced in from February 1 until after Easter. During such periods, the feelings of isolation and loneliness experienced by some islanders were intense. Recalled Goos, "I used to cry a good many times . . . If I could have saved all my tears, they could have melted all the ice in the harbor."133

133 Vera Crites Goos, interview.

Figure 3.18. Lack of a natural harbor complicated transportation to and from North Manitou Island, especially during the late winter months when the Manitou Passage filled with ice. Because it was unsheltered, the village dock often suffered damage from winter ice and storms. Only relatively wealthy land owners, such as Nicholas Pickard, Silas Boardman, the Newhalls, and William Angell, could afford the substantial infrastructure cost of maintaining a dock on the island.



Simply marketing agricultural commodities required a capital outlay that was beyond the means of many independent agriculturists. Consequently, most of the island's small landowners adopted a diversified subsistence strategy. In addition to agriculture, most engaged in other activities such as wood cutting and fishing, or wage labor with the one of the island's large landowners, the life-saving service, or summer residents. Several island agriculturists probably did not exclusively rely upon farming for their livelihood. Many farmers abandoned agriculture altogether when another venture, such as employment with a logging company, became more lucrative.

Adding to the economic difficulties of North Manitou farmers, physical factors—poor soils, lack of a natural harbor, and geographic isolation—constrained the development of agriculture on the island. The nutrient-poor, drought-susceptible soils that predominate over much of the island were ill-suited to traditional cereal and forage crops. Paul Maleski, Jr., reported that even during the heyday of the Maleskis' cattle operation, his father was careful to keep the size of the herd within the island's carrying capacity. He noted that in times of drought there was a hay shortage on the island and his father was forced to purchase hay that was shipped from Chicago aboard a car ferry. He also recalled that during dry summers, farmers would cut bracken fern and feed the dried ferns to their cattle.¹³⁴

Poor soils and geographic isolation were limiting factors that effectively dictated that commercial agriculture had to be extensive in scale in order to be profitable. Commercial production necessarily involved large parcels of land and was fairly specialized in order to reliably produce enough of a commodity to make shipping it off the island profitable. The Maleskis and other independent farmers couldn't engage in this type of agriculture because they lacked sufficient land and capital. The output of these farms remained diversified, concentrating on staples required by the family. The commercial ventures were more specialized, and tended to concentrate on two types of commodities: livestock and fruit. All were financed by outside capital. Initially, this form of agriculture functioned as a diversion for the wealthy, such as the "hobby farm" of Silas Boardman. Even the Newhalls, who farmed more intensively than Boardman, seem to have regarded their North Manitou farm as a agrarian diversion from more serious business dealings in the Chicago commodities market. (figure 3.19).

Large-scale, commercial farming eventually displaced intensive, subsistence agriculture on North Manitou Island. By the mid-1920s the Manitou Island Association dominated the island economy, and exploited its small labor pool and market. A circular economy developed, with the MIA largely controlling both the means of production and consumption. The MIA effectively displaced independent growers from the local market. As MIA employ-

¹³⁴ Paul Maleski, Jr., interview with the authors, 26 July 1997.



Figure 3.19. John Newhall and "Mr. Thompson" harvesting hay on North Manitou Island, ca. 1900. The staged appearance of this photograph and the caption that reads "imitation of a man at work" suggest that although the Newhalls ran the island farm as a business, they also regarded it as a place of escape, leaving much of the day-to-day farm work to hired employees.

ees, the islanders supported the system by purchasing from the company the very commodities that their labor had produced.

Neotechnic agriculture arrived on North Manitou Island with the Manitou Island Association. Although the Newhalls may have implemented "scientific" agricultural methods in managing their island fruit orchards, there is little specific information about the techniques they employed. Their operation certainly was not as mechanized as the MIA farm. Business records reveal that the association purchased a new Fordson tractor for \$556.50 in 1925. That same year the MIA sold a pair of draft horses for \$400.00. Motorized vehicles played an increasingly important role in connecting the vast Association operation. Trucks were used to travel between the main farms, and to and from the scattered fields and orchards. When weather allowed, they also were used to distribute deer feed.

The most obvious hallmark of scientific, neotechnic, agriculture on North Manitou Island was the way in which the MIA farm operation was managed. MIA shareholders were interested in efficient management according to modern principles of business, and employed a hierarchical management structure. Professionalization was evident in all aspects of the MIA's business enterprise, from deer herd management to forestry. For example, the MIA employed a full-time farm manager, and paid John Maleski to receive training as a professional orchard manager. Furthermore, the landscape scale of the operation became extensive, encompassing virtually the entire island. Corporate agriculture, as exemplified by the MIA farm, was not traditional husbandry or a vocation, but rather a business.

Agriculture on South Manitou and North Manitou Islands Compared

Although similar in some respects, the agricultural history of North Manitou Island differs markedly from that of nearby mainland farming communities and neighboring South Manitou Island. As on North Manitou Island, settlement on South Manitou was initially spurred by logging for the Great Lakes cord wood trade, followed by the development of small, subsistence farms. On South Manitou, several independent farmers made the transition from "general farming" to specialized, commercial agricultural production based on scientific agriculture. Although economically viable, South Manitou's farms remained small and few in number. In contrast, North Manitou's small farmers co-existed with wealthy large land owners, and the relationship between these two classes of agriculturists was tenuous, if not sometimes adversarial. Especially during the late nineteenth and early twentieth centuries the interests of these two groups clashed over grazing priveleges. Wealthy landowners also appear to have gained from the economic hardships faced by the island's small farmers, often expanding their land holdings and agricultural production simply by purchasing already-developed farms.

Perhaps because large tracts of the island already were owned by wealthy, absentee landlords, the Homestead Act had no immediate impact on North Manitou land ownership patterns. The island's first homestead claim was not filed until eleven years after the 1864 enactment of the Homestead Act, and seven years after the first claim on South Manitou Island. On South Manitou, homesteading was "the prevalent approach used to obtain agricultural land on the island." Approximately one third of the island's total land area, or 1,943 acres, including most of the land best suited to agriculture, was disposed through the homestead process. In contrast, North Manitou's homestead claims totaled just over 1,428 acres, which represented less than ten percent of the island's total area. Much of this land was in the southern portion of the island and was poorly suited to cultivation.

The existence of a close-knit farming community encouraged cooperation and contributed to the success of small, independent, owner-occupied family farms on South Manitou Island. However, North Manitou Island's agricultural population was significantly more transient. Subsistence farmers on North Manitou Island engaged in a number of activities in order to eke out a livelihood. However, many farmers abandoned agriculture altogether when another venture became sufficiently lucrative. Only three of the island's ten homesteaders are documented to have remained on the island longer than ten years after acquiring their patent. However, all three—Alvar Bournique, Nicholas Feilen, and John O. Anderson—had means of support external to their own farms, and there is no evidence to suggest that any of them engaged in intensive agriculture on their land after receiving patents to their claims. Perhaps many homesteaders did not view their claims as lifelong agricultural ventures. Instead, they may have considered them short-term investments that eventually would be sold in hopes of realizing a modest profit. Use of the homestead process for specula-

¹³⁵ Williams et al., 'Coming through with Rye,' 31.

tive purposes may have been common in marginal environments such as islands. ¹³⁶ North Manitou Island thus lacked the stable, socially cohesive farm community that existed on South Manitou Island.

Like the farmers on North Manitou, the South Manitou farming community faced marketing problems due to geographic isolation. However, a unique event transformed South Manitou's remoteness into an asset. On South Manitou, the phase of scientific agriculture began in 1918 when Michigan State University researchers began using the island for production of Rosen Rye seed. Seed production of Rosen rye and, later, Michelite beans, simultaneously depended upon the island's geographic isolation and the existence of a stable, cohesive community of farmers. 137 In turn, tye provided South Manitou farmers with a market that was reliable and specialized enough to off-set the island's geographic disadvantages. Agricultural production thus remained economically viable due to the external provided by the university. Agricultural production on North Manitou Island also became increasingly specialized century (e.g., fruit and venison) during the early twentieth. Lacking external institutional assistance, however, specialized production could only be attempted by wealthy individuals or corporate entities who possessed extensive capital reserves. Intensive, commercial agriculture was beyond the means of most North Manitou farmers.

Agriculture and Landscape Change

Landscape change is a never-ending phenomenon that results from both the activities and ideas of humans and from forces of non-human nature. Changes may be cyclical; they may result from additive or subtractive processes. Change may occur so gradually as to be perceivable only over very large time scales. Such transformation is almost always subtle. However, change also may be sudden, drastic, even cataclysmic. Landscape change on North Manitou exemplifies both tendencies—gradual, continuous evolution punctuated by major events such as a catastrophic storm or a flurry of logging activity. We may be less conscious of gradual changes, but they are no less far-reaching and long-lasting. Agriculture displays both of these tendencies as well.

The Manitou Island Association venison ranch blurred distinctions between traditional animal husbandry and wildlife management. The ranch is just one subtle, yet extensive, way in which agriculture shaped the landscape of North Manitou Island, and it demonstrates how the legacy of agriculture continues to influence the landscape, not only ecologically, but also aesthetically, and in terms of our mental picture. It also suggests how deeply the landscape, with all of its diverse constitutional lifeforms, is constructed by human values. Today, the North Manitou deer herd serves as a reminder of the island's human history, even though most observers probably do not see in them "the hand of human-kind."

¹³⁶ For an account of a similar land tenure pattern at the Apostle Islands in Lake Superior, see Arnold R. Alanen and William H. Tishler, "Farming the Lake Superior shore: Agriculture and Horticulture on the Apostle Islands, 1840-1940," Wisconsin Magazine of History, 79(3): 163-203 (Spring 1996).

137 Williams et al, Coming through with Rye.'

The story of agriculture on North Manitou Island clearly is unique within the lakeshore. In terms of scope and scale, only the activities of D. H. Day on the mainland compare with the endeavors undertaken by North Manitou's large landowners. Unlike Day's various ventures, however, North Manitou's farms were developed by absentee landowners who represented external capital. The North Manitou story thus represents the Sleeping Bear Dunes region's strong economic connections with other parts of the Midwest. Contrary to being mundane, such stories may be more meaningful in today's cultural context, and they may be most clearly discerned in well-preserved vernacular, or "ordinary," landscapes such as North Manitou Island. The North Manitou Island landscape is a product of its history. It is an accumulation, an accretion of the effects of people and events acting over time. As such, the landscape embodies fundamental human relationships between nature and time. The history of the North Manitou landscape is a story about these relationships, and agriculture is foremost among these. It is a story etched on the land in simple houses, grand barns, overgrown hedgerows, neatly-spaced fruit trees, and clearings carved out of the woods.

Chapter Four

Description and Analysis of Individual Sites



Cultural resources associated with historic agricultural activities survive with varying degrees of integrity on North Manitou Island. This chapter provides a description of these resources, as well as a more detailed account of the role that various landscapes played in the history of agriculture on the island. Discussions of specific resources are organized into four categories according levels of physical integrity: (1) sites with standing structures; (2) sites with structural ruins; (3) sites with cultural landscape remnants, and (4) farms with no extant features (figure 4.1). In addition to agricultural sites, this chapter includes brief descriptions of several significant non-farm-related properties, specifically, the summer homes of Cottage Row and the buildings of the North Manitou U.S. Life-Saving Service Station (figure 4.2).

SITES WITH STANDING STRUCTURES

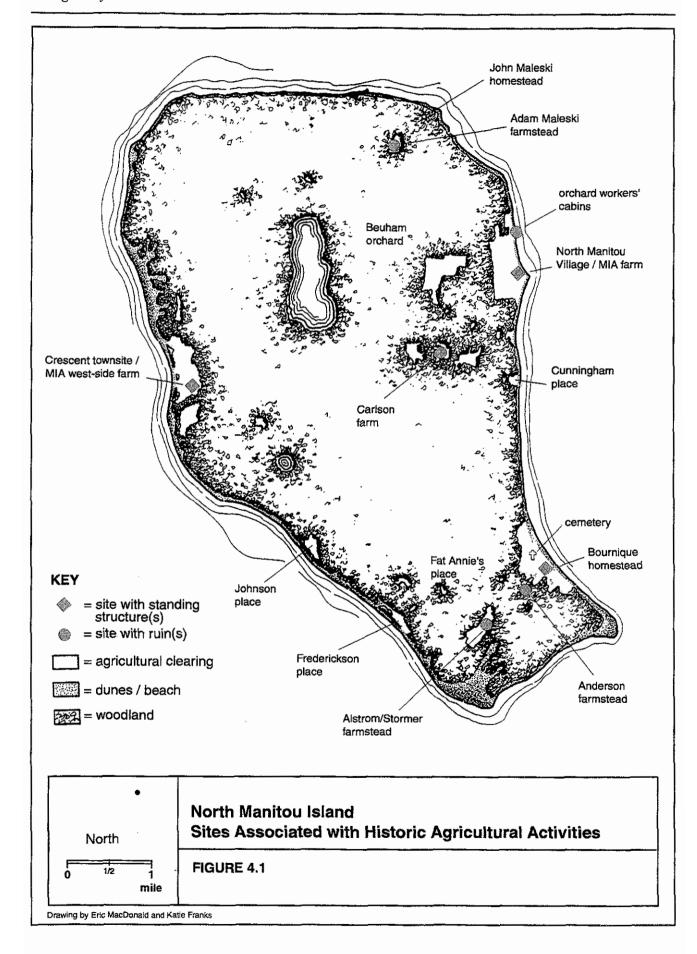
Manitou Island Syndicate / Manitou Island Association North Manitou Village Farm Complex

NW 1/4, SE 1/4, Section 34, T-32N R-15W

History and Agricultural Data¹

The business organization initially known as the Manitou Island Syndicate, and later as the Manitou Island Association (MIA), dominated North Manitou agriculture during the mid-1920s through the 1940s. Although the association undertook various agricultural and quasi-agricultural endeavors throughout its extensive island land

¹ This section focuses on the agricultural landscapes and structures that were built and utilized by the Manitou Island Association. For a more detailed account of the MIA's farming enterprise on North Manitou Island, see Chapter Three.



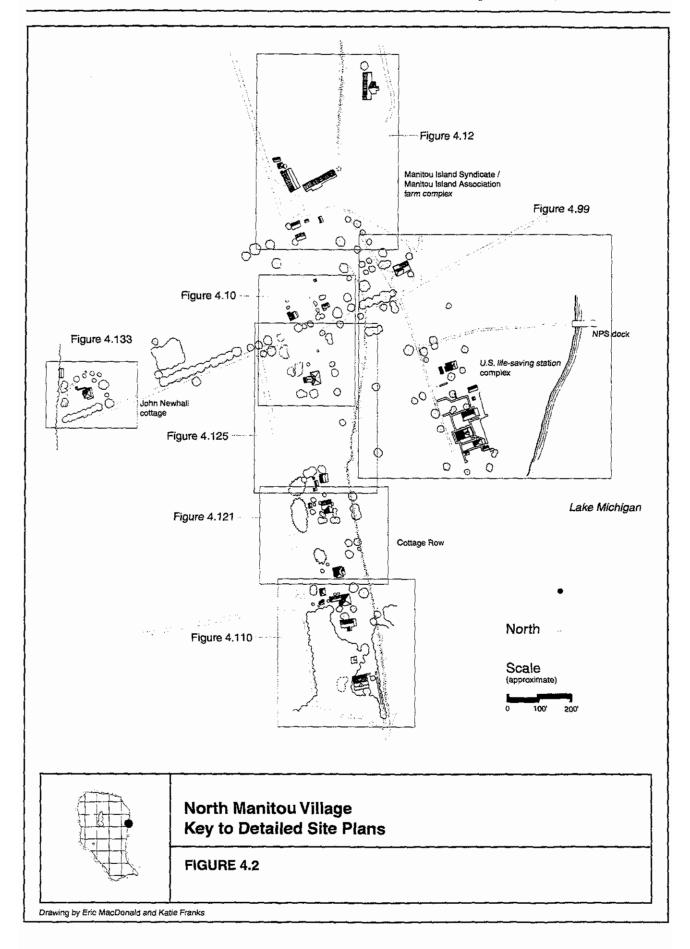


Figure 4.3. Employees of the Newhalls pose in front of one of the large timber-frame barns built by Silas R. Boardman during the 1880s.





Figure 4.4. The "farmhouse," ca. 1910s. This structure served as the Boardman family's North Manitou home. The house subsequently was owned by the Newhall family, the Manitou Island Syndicate, and the Manitou Island Association. It was destroyed by fire sometime in the late 1920s.

holdings, the syndicate's farming activities were centered on the eastern side of the island near North Manitou Village, and near the western shore at the former farmstead of Peter Swenson. During the late 1920s the MIA developed an extensive complex of buildings at the northern edge of North Manitou Village to function as a headquarters for its island activities. This complex occupied the site of Silas R. Boardman's former farmstead, which subsequently had been owned by the Newhall family before it was acquired by the Manitou Island Syndicate (figures 4.3 and 4.4). The principal dwelling of the MIA complex, a building known as the "farmhouse," may have been constructed by Silas Boardman. Rita Hadra Rusco recalled that the farmhouse was "a huge frame structure located near the site of the present-day stone office building." Rusco noted that the house "was built during the early 1880s and provided accommodations for tourists and summer guests during the prosperous resort years."2 This building was destroyed by fire during the late

² Rita Hadra Rusco, North Manitou Island: Between Sunrise and Sunset. (n.p.: Book Crafters, 1991), 18.



Figure 4.5. Manitou Island Association barn during construction, 1927. The large, modern, gambrel-roofed barn was the centerpiece of the MIA's farmstead at North Manitou Village. It was built on a site amidst the farm formerly operated by Silas Boardman and the Newhalls.

1920s.3 No other farm buildings from the Boardman and Newhall periods survive.

In 1927, the Manitou Island Association constructed a large gambrel-roofed barn on the beach ridge north of Cottage Row (figure 4.5).4 Members of the barn building crew included Paul Papa, Mike Pohaulski, John King, and Barney Stanislowski from Cedar, and William Leo from Suttons Bay. The barn foundation was built by Mike Hoef.⁵ The MIA also paid Nicholas Feilen \$233.90 for "carpenter work" in October 1927, perhaps for labor related to the construction of the barn or other outbuildings.6 The MIA used the structure to support its dairy operation, and to pack and store the annual cherry and deer harvests until they could be shipped to the mainland. The barn may have been used last as a dairy facility during the mid-1930s.7 Since the Angell Foundation continued to harvest cherries on the island into the early 1950s, the barn may have been used for temporary fruit storage until that time. During NPS fall deer hunts, the barn's basement-level cold-storage room continues to serve its original function.

Below the beach ridge, south of the barn and the barnyard, the MIA constructed a sawmill. According to Fritz, the structure was erected in 1928.8 The mill's equipment came from Peter Stormer's sawmill on the southeastern end of the island.9 The mill supported the MIA's farming operations, producing lumber and cedar shingles for making repairs, and for constructing buildings such as cabins for migrant orchard workers. The MIA mill never engaged in continuous commercial production. It was active during the 1930s, but may have operated for the last time during World War II. Michigan Department of Conservation biologist Ilo H. Bartlett noted that the sawmill operated during the 1942-43 winter,

³ Josephine Alford Hollister, "The Summer Resort on North Manitou Island," February 1989, Sleeping Bear Dunes National Lakeshore, Empire, Mich.

⁴ Giles E. Merritt, "U.S. Coast Guard N. Manitou Isl. Events 1925-28," 26
August 1991, Sleeping Bear Dunes
National Lakeshore, Empire, Mich.;
David L. Fritz, "Eastside Barn," Draft
National Register of Historic Places
Registration Form, 25 September 1987,
Sleeping Bear Dunes National
Lakeshore, Empire, Mich.

⁵ Fritz, "Eastside Barn;" Fritz's source was an interview with Julia (Craker) Kinnucan.

⁶ Manitou Island Association Accounts Journal, September 1924 - December 1929, MIA Collection, Sleeping Bear Dunes National Lakeshore, Empire, Mich

⁷ Jean Lundquist, interview by Eric MacDonald, Leland, Mich., 27 June 1999, notes filed at Sleeping Bear Dunes National Lakeshore, Empire, Mich.

⁸ David L. Fritz, "North Manitou Village Sawmill," Draft National Register of Historic Places Registration Form, 14 September 14, 1987, Sleeping Bear Dunes National Lakeshore, Empire, Mich.

⁹ Josephine Alford Hollister, "The Sawmill," February 1989, Sleeping Bear Dunes National Lakeshore, Empire, Mich.

Hollister, "Sawmill," Fritz, "North Manitou Village Sawmill."

11 Hollister, "Sawmill;" Fritz, "North Manitou Village Sawmill." processing timber blown down during a 1940 storm. Bartlett also noted that logging was occurring "in the patch of over-mature virgin timber of the northern end of the island."¹²

Following completion of the barn and sawmill, the MIA added other, smaller structures to the farm complex. The most significant of these was an equipment shed for storing and servicing farm machinery. According to George Grosvenor, the equipment shed was built sometime during the 1930s. The shed housed equipment used by the MIA for its deer hunting and agricultural operations, including a thresher. Jean Lundquist recalled that she and other island residents would service their vehicles at the MIA barn/equipment shed area during the 1940s and 1950s. Other outbuildings included a carpenter's shop, and a machine shop. During the 1940s the MIA equipped the bottom of the machine shop as a community laundry facility.

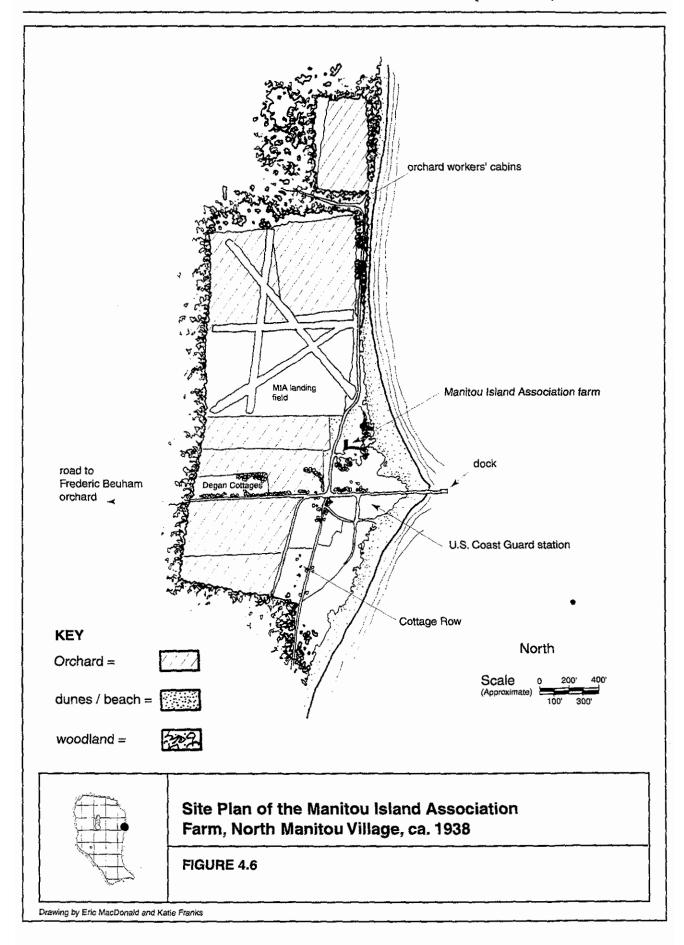
The MIA utilized an extensive tract of cleared land north and east of the farm complex for livestock pasture, field crops, and orchards (figure 4.6). Giles Merritt estimated that the MIA cultivated approximately thirty acres in crops, including potatoes, corn, and hay during the late 1920s,. The MIA's east-side farming operation also included cherries, apples, and fodder for horses, cows, pigs, and chickens. Most of the cherry orchards were located south of the dock road. 17

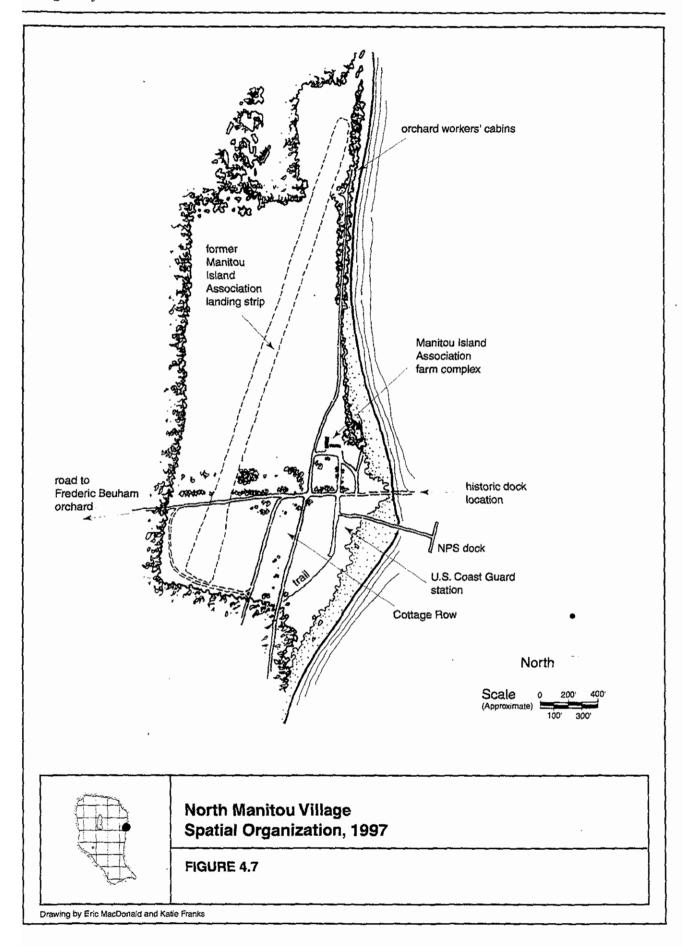
Location and Landscape Setting

The Manitou Island Association (MIA) farm complex is located at the northern end of North Manitou Village (figure 4.7). The buildings are arranged along a beach ridge that affords excellent views of the Manitou Passage to the east, and of other village structures to the south. To the north and west, the terrain slopes gently upward across an expansive clearing that is approximately 3/4 mile in its north-south dimension and 1/4 mile in its east-west dimension. Formerly used as fields, pasture, orchards, and an airplane landing strip, this cleared area now is covered with herbaceous plants and a few scattered shrubs, mostly Rosa spp. (figure 4.8). The clearing is spatially defined by dense maple-beech forest on all but the eastern side, which is bounded by the Lake Michigan beach ridge. A gambrel-roofed barn, the largest structure of the village farm complex, is visible from most positions within the clearing, and when approaching North Manitou Island from Lake Michigan. The location of the farm complex is further demarcated by groupings of tall, columnar, Lombardy (Populus nigra) poplar trees, which grow near the buildings.

The clearing is bisected by an east-west roadway that leads from the site of the former village dock to Lake Manitou (figure 4.9). Along this "dock road," near the crest of the beach ridge, is a small hip-roofed, stone building that was constructed by the MIA as its business office (figure 4.10). The northern edge of the road in

- 12 I. H. Bartlett, The North Manitou Island Deer Herd: A History and Suggested Management Plan (Lansing: Deer Investigations, Game Division, Department of Conservation, 4 February 1944), 3. The "over mature" timber mentioned by Bartlett may have been located in a tract of approximately sixty acres of virgin sugar maple, yellow birch (Betula alleghaniensis), and hemlock located in the southeastern portion of Section 21, T32N, R14W, which was noted on p. 2 of his report.
- ¹³ Kim Mann to Ellyn Goldkyn, 24 July 1994, Sleeping Bear Dunes National Lakeshore, Empire, Mich.
- 14 Lundquist, interview.
- ¹⁵ Rusco, North Manitou Island, 93.
- ¹⁶ David L. Fritz, "History Data Report on North Manitou Island, Leelanau County, Michigan" (Denver: National Park Service, April 1987), 28; Fritz's source is Giles E. Merritt.
- ¹⁷ Giles E. Merritt, untitled manuscript, 11 February 1986, Skeeping Bear Dunes National Lakeshore, Empire, Mich.





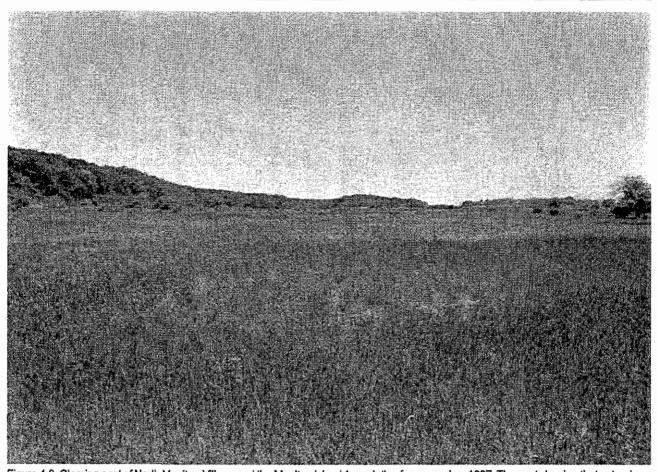


Figure 4.8. Clearing east of North Manitou Village and the Manitou Island Association farm complex, 1997. The vast clearing that extends westward and northward from North Manitou Village may have originated with early cord-wood cutting activities. Orange Risdon's 1847 survey of the island recorded a small "chopping" in the vicinity of the present-day village. The area later served as the headquarters of Nicholas Pickard's wood-cutting operation. Pickard, Silas R. Boardman, and the Newhalls probably used much of the clearing as pasture and crop land. During the 1910s and 1920s the Newhalls and the Manitou Island Association added large cherry orchards and a landing strip for airplanes. The orchards were removed by the association in the 1950s, and the landing strip and hangar were removed by the NPS soon after the island became part of Sleeping Bear Dunes National Lakeshore.

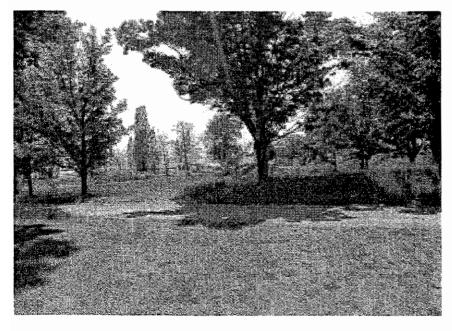
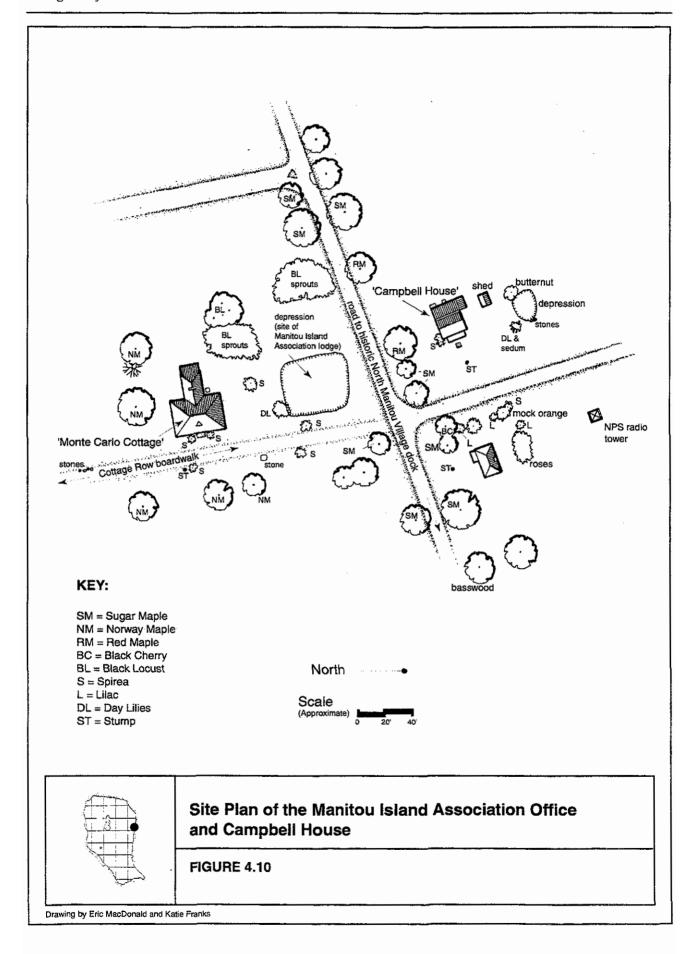


Figure 4.9. The road that forms the southern boundary of the farm district once connected the former North Manitou Village dock with Lake Manitou and the interior of the island. In many sections within the village area, large sugar maple trees line the roadway.

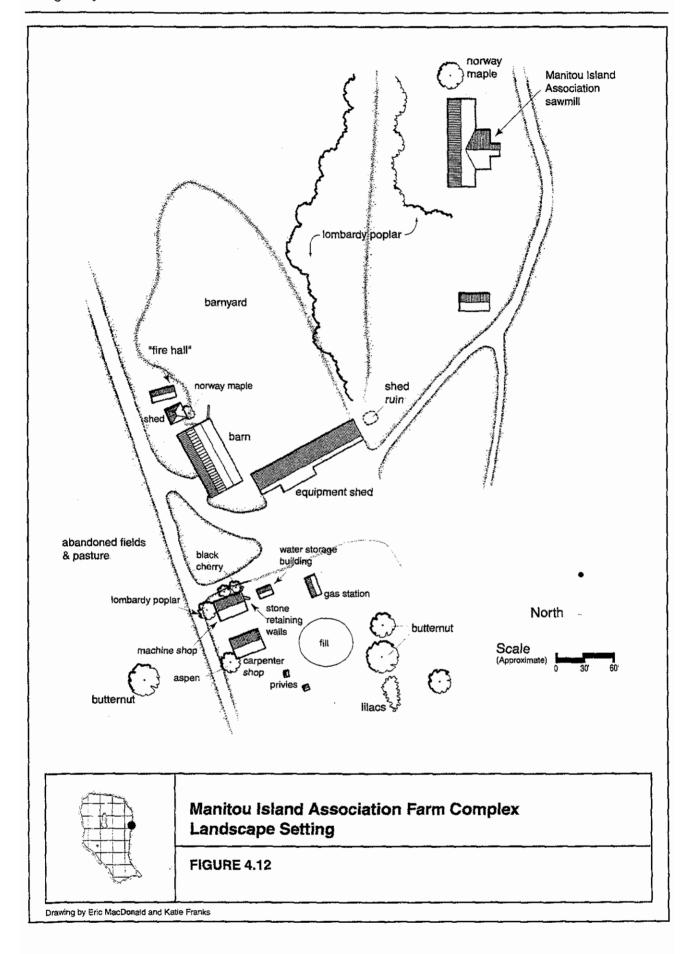


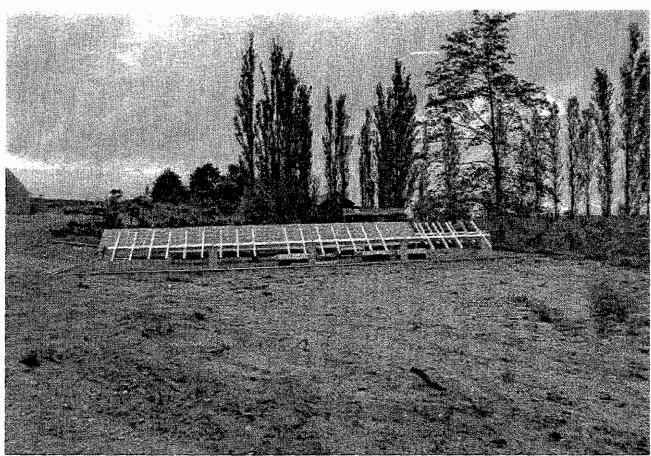
this vicinity is lined by a row of large, regularly spaced sugar maple (Acer saccharum) trees. Two cross-roads, one south and the other north of the office building, lead from the dock road to the main cluster of farm buildings. The "Campbell House," a small clapboard dwelling that functioned as housing for employees of the MIA, is located near the intersection of the northern road with the dock road. This road continues northward to the village barn, then following the crest of the beach ridge, proceeds into the forest at the northern edge of the clearing. The southern cross-road was once lined on both sides by rows of butternut (Juglans cinerea) trees; however, only a few specimens remain. Near the intersection of this road with the dock road stands a concrete garage/generator building, portions of which probably date to the Angell Foundation era.

Most of the MIA farm buildings are clustered in an area north of the stone office building (figure 4.12). The large gambrel-roofed barn, equipment shed, two storage sheds, and a shed known as the "fire hall" are arranged around the edge of a bowl-shaped depression that once served as a barnyard for the MIA's dairy cattle. Across from the equipment shed is a cluster of small structures including a carpenter shop, machine shop, water storage shed, and a gas station. The gas station and water storage building define the edge of a staging area south of the equipment shed (figure 4.11). West of the water storage building and gas station are the machine

Figure 4.11. Manitou Island Association equipment shed and staging area, 1996. A "working yard" is defined spatially by the MIA equipment shed, the uphill slope of the beach ridge, and the water storage shed and gas station.







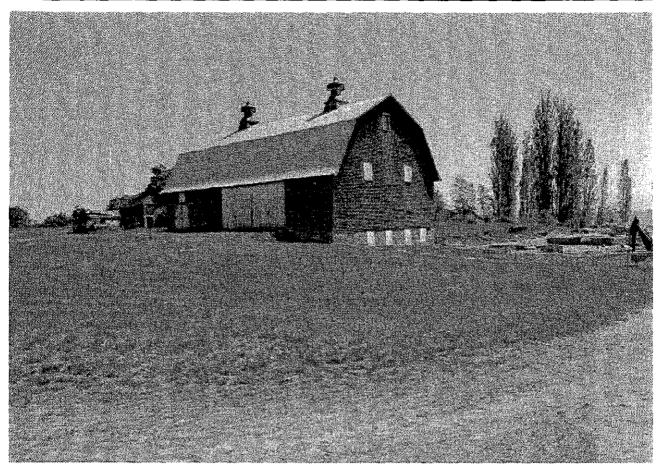
shop and carpenter shop ruins. A new photovoltaic array, partially screened by a cluster of large Lombardy poplar trees, is located southwest of the farm complex (figure 4.13). Below the beach ridge, east and slightly north of the barn and barnyard, is the MIA sawmill, a large heavy-timber-framed, gable-roofed structure. Although proximate to the MIA farm buildings, the sawmill is spatially and visually separated from the MIA farm complex by the beach ridge. A shed ruin is located south of the sawmill, and a small hip-roofed privy is located north of the mill at the base of the beach ridge.

Buildings, Structures and Objects

The largest and most visually prominent structure in the farm complex is the MIA barn, which rests upon coursed cobblestone foundation walls that were built into the east-facing slope of the beach ridge (figure 4.14). The walls of the barn are clad with wood shingles.¹⁸ The metal roof is surmounted by two large metal ventilators. Measuring approximately 40' x 80', the barn has five structural bays, with the long axis oriented north-south. The northernmost bay is partitioned from the rest of the barn and has a walk-in cold storage room on the basement level, and a series of lofts above. The cold storage room was used for deer carcasses, and the upper levels were used for storing cherries. The southern four bays housed livestock at the basement level, with hay storage above. The basement level contains five box stalls, milking stanchions for ten cows,

Figure 4.13. Photovoltaic (PV) array, 1996. A National Park Service proposal to install a solar energy system on North Manitou Island ignited public interest in the history and aesthetic character of the North Manitou Village landscape. After negotiating with the Michigan State Historic Preservation Office and other interested parties, the NPS constructed a photovoltaic array in the vicinity of the historic MIA farm complex during summer 1996. The photovoltaic array is partially screened by vegetation, yet its modern, synthetic materials and form contrast starkly with the vernacular character of the surrounding landscape.

¹⁸ According to Fritz the galvanized metal roof is "of recent vintage." See Fritz, "Eastside Barn."



19 Numerous light wood framing systems for barns were promoted during the early twentieth century. Most utilized a ballon framing system, similar to that which was then common in residential construction, and a gambrel roof supported by wood trusses. The truss designed by John L. Shawver was widely disseminated through his book, Plank Frame Barn Construction, which was published in 1904. Shawver's trusses were constructed of standard-dimension, milled lumber, and fastened to the upper plate of the balloon frame. The Shawver and other plank-frame structural systems were widely promoted by the United States Department of Agriculture and university extension programs. For more information on the evolution of barn framing and structural systems in Michigan, see Hemalata C. Dandekar, Robert M. Darvis and Eric Allen MacDonald, Structural Preservation and Adaptive Reuse of Michigan Barns (Lansing, Mich.: Michigan Department of State, 1992).

Figure 4.14. Manitou Island Association barn, 1996. An ancient beach ridge that runs in a north-south direction along the eastern shore of the island is the most prominent topographical feature in the vicinity of North Manitou Village. Within the MIA farm complex, the ridge not only defines space, but also serves as an organizational element in the siting of several farm structures. The basement level of the MIA village barn was integrated into the east-facing slope of the ridge.

and a concrete floor throughout its extent. The upper portion of the barn has a light wood-frame structural system, while the gambrel roof is supported by six Shawver, or plank, trusses. ¹⁹ North of the barn, on the beach ridge, are two smaller structures: a storage shed and a structure known as the "fire hall" (figure 4.15). Both are more-or-less square in plan. The storage shed has wood clapboard siding and a hip roof. The fire hall has clapboard siding and a metal gable roof.

The MIA equipment shed is the second-largest structure in the farm complex, measuring approximately 19' x 100'. It is located directly southeast of the MIA barn, with its long axis oriented perpendicular to the barn (figure 4.16). The shed thus defines the southern edge of the barnyard space to the north, and the northern edge of the working yard or staging area to the south. The wood shingle-clad shed has a light-wood frame structure that rests upon a cast concrete foundation. It has six structural bays. The western and eastern end bays are enclosed with horizontal board siding; the four central bays are open to the south, with vertical and horizontal

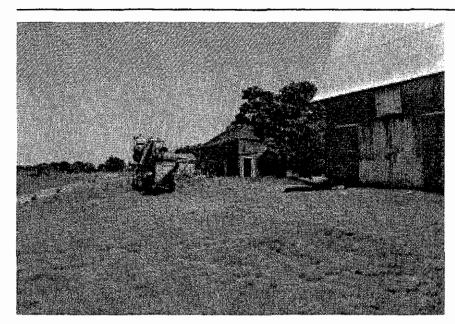


Figure 4.15. Manitou Island Association barn (right), "fire hall" (center), and threshing machine (left), 1996. The hiproofed fire hall is one of two small storage buildings situated north of the barn along the crest of a beach ridge.

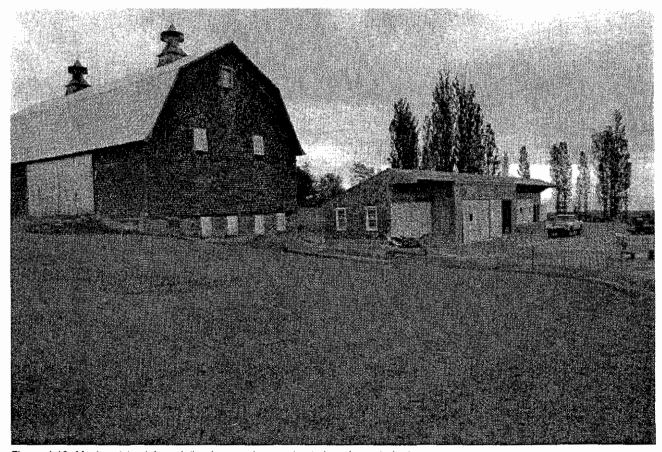


Figure 4.16. Manitou Island Association barn and reconstructed equipment shed, 1996. Constructed during the 1930s, the original equipment shed played a key role in defining the southern edge of the barnyard space that extends eastward from the basement level of the MiA village barn. The southern elevation of the shed opened onto a small, flat yard where farm equipment was temporarily stored or serviced.

Figure 4.17. Manitou Island Association gas station. A small gas station stands opposite the equipment shed, along the southern edge of the farm yard. The gas station represents a specialized building type—one made necessary by the MIA's utilization of large machinery powered by fossil fuels. Along with the equipment shed, the gas station is a key resource in distinguishing the MIA farm as a modern, "neotechnic" agricultural enterprise.

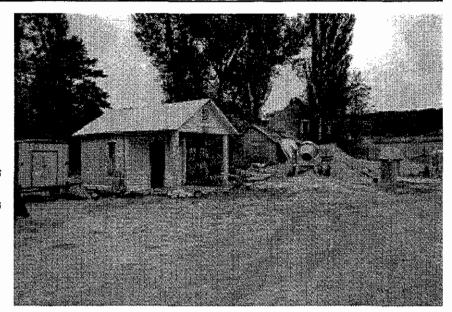




Figure 4.18. Manitou Island Association carpenter shop and machine shop, 1996. Like the large barn, the basement level of the carpenter and machine shops were integrated into the slope of the beach ridge. Although their cobblestone foundations remain intact, the wooden superstructures of both shops currently are in ruinous condition.

siding above the openings. During the 1996 building season the shed was dismantled and reconstructed to accommodate NPS equipment and space for the photovoltaic array. The reconstructed equipment shed occupies the footprint of the historic shed and closely approximates its historic appearance. Although some historic building materials were incorporated into the new structure, the shed is mostly composed of new materials. A small shed ruin, now almost completely obscured within a grove of Lombardy poplars, lies directly east of the equipment shed.

The gas station has wood clapboard siding and a gable roof that projects beyond the structure to form a sheltered front porch (figure 4.17). The water storage building is a clapboard, side-gabled structure. Although the carpenter shop and machine shop appeared to be in good condition when Shunichi Hagiwara completed his inventory in 1979, both are now in ruinous condition (figure 4.18).²⁰

²⁰ Shunichi Hagiwara, "Building-Structure Inventory for North Manitou Island," September 1979, Sleeping Bear Dunes National Lakeshore, Empire, Michigan.

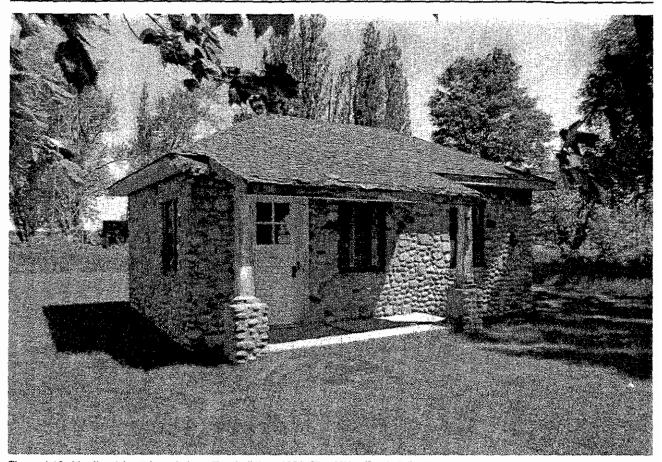


Figure 4.19. Manifou Island Association office building, 1996. The MIA office building is a small, yet solidly constructed building. The office has a specialized function that is typical of modern, "neotechnic" agricultural buildings. It reflects the MIA's conception of the farm as a business, and the association's hierarchical managerial structure.

Originally, both structures rested upon stone foundations that were built into the slope of the beach ridge. Southeast of these structures is a small depression, which is now densely wooded. In this area are two ruinous privies, which appear to have been moved to their current positions from other locales.

The MIA office building is located west of the carpenter shop and machine shop ruins, along the road leading to the former North Manitou dock. It is a small hip-roofed structure, with a simple rectangular footprint and thick, fieldstone walls (figure 4.19). The road in front of the office building is lined with large, regularly-spaced sugar maple trees. North of the office building, situated near the northwestern corner of the intersection of the northern farm road and the dock road, is a small vernacular dwelling known as the "Campbell House"—a one-story, side-gabled dwelling that the Manitou Island Association used as housing for its workers (figure 4.20). The house is named after Russell Campbell, an MIA employee who resided there with his wife during the 1950s. This may be one of several houses that, according to Josephine Hollister, was once located in the "farm yard" of Silas Boardman's farmstead (figures 4.21 and 4.22).²¹ Cultural landscape features at this site

²¹ Hollister, "Summer Resort."

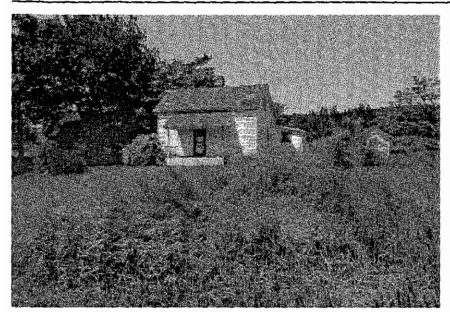


Figure 4.20. Campbell House, 1996. The residence known as the "Campbell House" reflects the importance of hired labor to corporate farming organizations like the Manitou Island Association. It represents the managerial structure of such operations, and thus constitutes an important and unique resource within the village.

Figure 4.21. Belgian draft horses graze in front of the "Campbell House" (left) and another small tenant farm house (right) on the Newhall farm, ca. 1900. Like the Hans Halseth house currently within the North Manitou U.S. Life-saving Service Station complex, the Campbell house probably does not occupy its original site. The Campbell house represents an important genre in the history of domestic architecture on the island: small, vernacular, wood-frame houses that frequently were relocated from site to site in accord with changes in ownership, tenancy, or economic considerations. As defined and conventionally employed by the National Register of Historic Places, "integrity of location" ceases to be a meaningful category of analysis when considering such highly-mobile vernacular buildings.



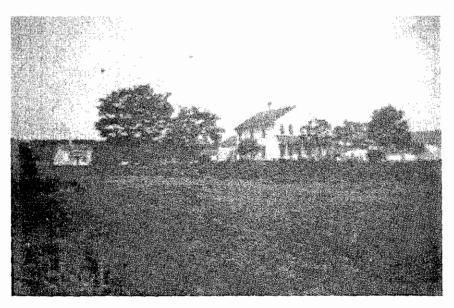


Figure 4.22. The "Campbell house" (far right) and the farmhouse (left) during the Newhall era (early 1900s).

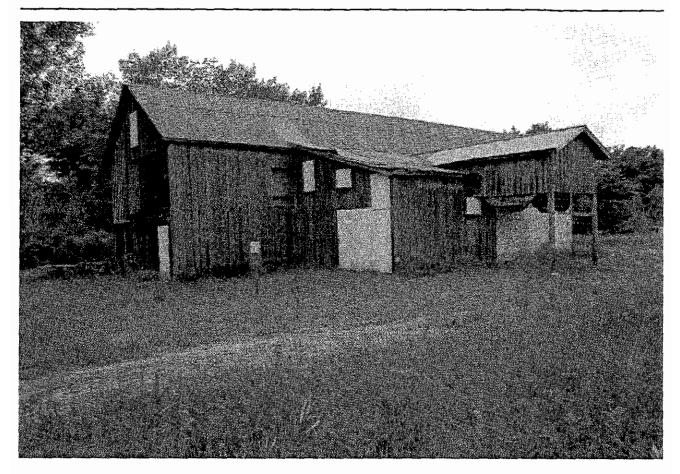


Figure 4.23. Manitou Island Association sawmill, 1996. The mill is partially composed of materials salvaged from Peter Stormer's mill at the southeastern end of the island. The sawmill was not central to the MIA's agricultural operations, but it did produce materials that the association used to construct and maintain its various farm structures. The mill was situated below the beach ridge on a site located several hundred feet from the barn, perhaps to provide ample room for piles of logs and lumber without interfering with nearby farming activities. The MIA sawmill remains in sound structural condition, representing two important phases of twentieth-century logging activity on North Manitou Island.

include a shed, concrete sidewalk, spirea shrubs, and plantings of daylilies and sedum.

The sawmill is a two-story, gable-roofed structure (figure 4.23). It has a heavy timber frame, which apparently was constructed with a assortment of circular-sawn, band-sawn, and hewn timbers that were recycled from other island structures.²² The building is sheathed with vertical boards and roofed with corrugated sheet metal. A small, hip-roofed, wood-frame privy is located a few yards north of the sawmill (figure 4.24).

Contributing Landscape Features

Threshing machine
Shed (ruin)
Privy #1 (ruin)
Privy #2 (ruin)

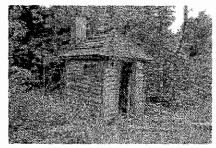


Figure 4.24. Privy near the MIA sawmill, 1996. The relatively refined materials and ornamentation of this privy suggests that it may have been relocated here from another site, perhaps one of the Cottage Row parcels.

²² Robert Foulkes, "Summary and Explanation of Timber Survey Notes for Sawmill on North Manitou Island, Sleeping Bear Dunes National Lakeshore," 20 March 1995, Sleeping Bear Dunes National Lakeshore, Empire, Mich. Lombardy poplar grove

Fire Hall (ruin)

Fence

Machine Shop (ruin)

Pump

Contributing Structures

MIA Office Building

Structure Number: 53122810 Dimensions: 24'-8" x 14'-5"

Foundation: cast concrete

Walls: cobblestone

Roof: hip; asphalt shingles

Water Storage Shed

Structure Number: 53122841

Dimensions: 14'-5" x 11'
Foundation: cast concrete
Walls: wood lap siding

Roof: asphalt

Barn

Structure Number: 53122809 Dimensions: 80'-6" x 40'-6"

Foundation: coursed cobblestone and concrete

Walls: wood shingles

Roof: galvanized, corrugated sheet metal

Gas Station

Structure Number: 53122813 Dimensions: 11'-6" x 19'-3" Foundation: cast concrete

Walls: wood lap siding

Roof: galvanized corrugated sheet metal

Carpenter Shop

Structure Number: 53122844

Dimensions:

Foundation: concrete, stone

Walls: wood shingles

Roof: gable; wood shingle / nonextant

Campbell House

Structure Number: 53122830

Dimensions: 20' x 30' Foundation: stone Walls: wood lap siding

Roof: asphalt

Fruit Storage Shed

Structure Number: 53122846

Dimensions: 20' x 15'
Foundation: none
Walls: vertical boards
Roof: hip; wood shingles

Campbell House Shed

Structure Number: 53122874

Dimensions: 12' x 7'
Foundation: none
Walls: wood lap siding

Roof: asphalt

Contributing Non-farm Structures

MIA Sawmill

Structure Number: 53122808 Dimensions: 90'-10" x 24'-6"

Foundation: mortared stone and brick

Walls: vertical wood boards

Roof: gable; metal

Generator Building

Structure Number: 53105802

Foundation: concrete Walls: concrete block Roof: sheet metal

Garage

Structure Number: 53122847

Dimensions: 25' x 15' Foundation: concrete

Walls: vertical boards with asphalt covering

Roof: asphalt

Non-contributing Structures

Equipment Shed²³

Structure Number: 53122807

Dimensions: 100' x 25'

Foundation: cast concrete

Walls: wood shingles, vertical and horizontal boards

Roof: gable; wood shingles

Photovoltaic Array

Foundation: cast concrete

Other materials: metal, plastic, glass

²³ According to National Register of Historic Places eligibility criteria, the MIA equipment shed is considered a non-contributing structure because it is a reconstruction. However, the design of the shed closely approximates that of the historic structure, and thus is compatible with the character of the historic district.

Manitou Island Association Migrant Orchard Workers' **Cabins**

NW 1/4, NE 1/4, Section 34, T-32N R-15W

History and Agricultural Data

According to Rita Hadra Rusco, during the mid-1930s the MIA constructed twenty-five one-room cabins to house migrant cherry harvest crews.24 A sketch map drawn in 1953 by the Detroit Insurance Agency noted the existence of nineteen cabins, which were valued collectively at \$3,800.25 Each cabin contained basic furnishings and utensils, including bunk beds with straw mattresses, a water tank, tables, lamps, dishes, and an array of kitchen tools ranging from a potato masher to a lemon squeezer (figure 4.25).26 The cabins were constructed along the shoreline road at the north-

Figure 4.25. The disintegration of the island community during the 1930s forced the MIA to import a migrant labor force for it annual cherry harvests. To house workers during their stay on the island, the MIA constructed a cluster of simple wooden shelters along the northeastern edge of its North Manitou Village orchards. Apparently the new аггаngement also necessitated the promulgation of "rules and regulations" governing the use of MiA-owned property.

Manitou Island Association

North Manitou Island, Michigan

INVENTORY

PICKERS COTTAGE	NO		
SILVER:	FURNISHINGS:	DISHES:	KITCHEN UTENSILS:
6 Tea Spoons	2 Springs	6 Dinner Plates	1 Broom
6 Table Forks	1 Wall Lamp	6 Coffee Cups	1 Coffee Pot
6 Table Knives	1 Reflector	6 Saucers	1 Dish Pan
6 Table Spoons	1 Table	1 Serving Dish	1 Fry Pan
1 Sugar Spoon	1 Mirror	1 Sugar Bowl	1 Kettle
1 Butter Knife	1 Oil Stove	1 Creamer	1 Ten Kettle
	*****	4 Water Tumblers	1 Can Opener
		1 Salt Shaker	2 Potato Masher
		1 Pepper Shaker	1 Cake Turner
		***************************************	l Water Pail
		**************************************	1 Wash Besin
			1 Water Dipper
	***************************************	***************************************	I Lemon Squeezer
		*:4:***;;;;4::4::4::4::4::4::4::4::4::4::4::4::	1 Keresene Can
		***************************************	1 Butcher Knife
	***************************************		***************************************

The above inventory has been checked by me. I agree to assume full responsibility for same and upon vacating to turn it over to the owners or their agents in as good condition as I found, it, barring reasonable wear and tear, and I will make good any missing or broken articles at that time. I have inspected the cottage in question and it is condition in satisfactory. I agree to leave clean all bedding, dishes, silverware, and other equipment, and I further agree to leave the cottage, so far as housekeeping it concerned, in a neat and tidy condition. Upon my failure to do the above you may have same done at my expense.

I further agree to give 2 days' notice of moving and to accept and abide by the notice, house rules and regulations found in following paragraphs.

RULES AND REGULATIONS

The occupants agree to abide by and conform to the following rules during the occupancy of said

- THE DANGER OF FIRES cannot be too strongly emphasized. If a fire should get started and spread
 to the woods, hundreds of thousands of dollars damage would result. Therefore it is necessary to be EXTREMELY CAREFUL WITH CIGARETTES, ETC.
 - 2. Garbage, tin cans, paper, etc., shall be deposited in receptacle provided for that purpose.
- 3. Do not permit anything to be done which will in any way molest or annoy the occupants of other cabins. No singing, playing of musical instruments or loud talking permitted between TEN THIRTY P. M. AND SEVEN A. M.
- 4. All equipment shall be permanently retained in its original position and location. This includes all doors, windows, screens, tables, beds, lamps, stoves and any other equipment or furnishings provided.
- 5. When leaving your cabin lock your door. A charge of fifty cents will be made for each key not recorned when leaving island.
- 6. Do not permit any cutting or marking of the walls, doors, etc.
- 7. These rules and regulations may be changed or added to from time to time when deemed necessary for the safety, care and cleanliness of the premises, and for the preservation of good order therein. Any constructive criticism tending toward improvement will be welcome.

The owners and managers will not be liable for any accidental damage to the person or property of the The owners and managers will not be liable for any accidental damage to the person or property of the occupants, nor for any damages occasioned by failure to keep said premises in repair, nor for damages done or occasioned thereby by fire, explosion, water, lamps in or about said bullding, or for damage acts of by water, rain, etc., coming through the roof, windows, doors, or otherwise, or for any damage artising from the acts or negligence of others occupying the same or other buildings, including loss or damage to property by theft, and the occupants in living in this building hereby consent and agree to make no claim for such loss or damage at any time. The occupants further expressly agree to vacate this cottage and leave the island when they finish picking or their services are dispensed with.

²⁴ Rusco, North Manitou Island, 23.

²⁵ Detroit Insurance Agency, "Manitou Island Assoc., North Manitou Island, Michigan," sketch map, September 1953, MIA Collection, Sleeping Bear Dunes National Lakeshore, Empire, Mich.

²⁶ Manitou Island Association, "Rules and Regulations [for cherry pickers' cabins]," ca. 1940?, MIA Collection, Sleeping Bear Dunes National Lakeshore, Empire, Mich.

eastern corner of the large east-side clearing. The cleared land to the southwest was utilized for the MIA airstrip and for apple and cherry orchards.

In 1957 a grass fire raged across the airfield and through the abandoned cherry and apple orchards. The fire destroyed a row of cherry pickers' shacks, most likely those lining the western side of the shoreline road. A newspaper article reported that the fire was started by a logger. The blaze, which extended over thirty-five acres, stopped at the edges of the road and woods, destroying twelve cabins; seven remained unscathed.²⁷

Location and Landscape Setting

Four of the MIA cherry pickers' cabins remain along the shoreline road leading northward from the village to the John Maleski homestead. In island lore, the stretch of road north of the cabins was designated "Lover's Lane," as it was there that U.S. coastguardsmen allegedly romanced their sweethearts.²⁸ The cabins are situated between the road and the crest of the lakeshore bluff, approximately a half mile north of the village dock (figure 4.26).29 The cabin entrances face west, toward the road. The area is now heavily wooded with young sugar maple, beech (Fagus grandifolia), and aspen (Populus tremuloides) trees, yet glimpses of the Manitou Passage can be seen through gaps in the trees. A dense, nearly monotypic stand of black locust trees (Robinia pseudoacacia) is located south of the cabin cluster. The oldest individuals may have been planted initially by the MIA as a windbreak. Southwest of the cherry pickers' cabins and the black locust grove is a relict apple orchard, which currently is a NPSdesignated camping site. A fifth cabin, which has been moved from its original location and converted into a storage shed, is located behind the Alford cottage on Cottage Row.

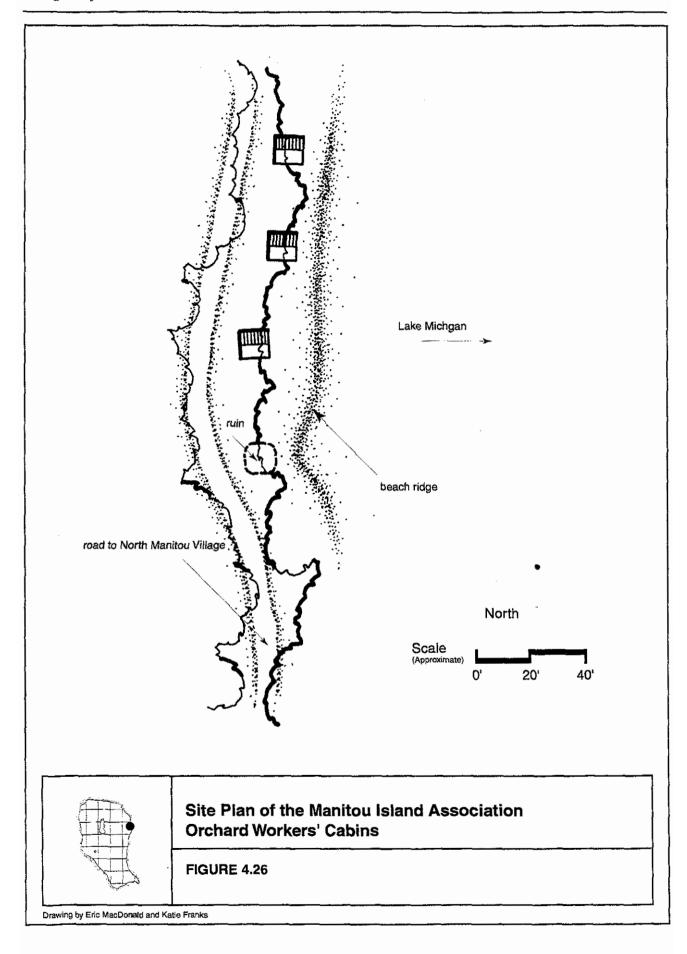
Buildings, Structures and Objects

All four cabins were in good structural condition when they were inventoried in 1979 by Shunichi Hagiwara. The cabins are gable-roofed, light-wood-framed structures clad with vertical board-and-batten siding (figure 4.27). Three of the cabins (one of which is in ruinous condition) are approximately twelve feet square in plan; one cabin is slightly larger, measuring twelve feet by fourteen feet. The floor of each cabin consists of planks nailed to a wooden platform that rests directly on the ground surface. The interior walls of the cabins are unfinished, with shelves built into the front gable walls. The front (western) wall of each cabin has a door opening, one small window, and small vent in the gable. One lateral wall on each cabin has a large pass-through window measuring approximately six feet wide by three feet high.

²⁷ "Rash of Grass Fires Threatens Damage on Mainland and Island," Leelanau Enterprise (?), 4 April 1957, Betty Kramer Collection, Leelanau Historical Museum, Leland, Mich.

²⁸ Lundquist, interview.

²⁹ UTM reference point: Zone 16, Easting 580306, Northing 4997794.



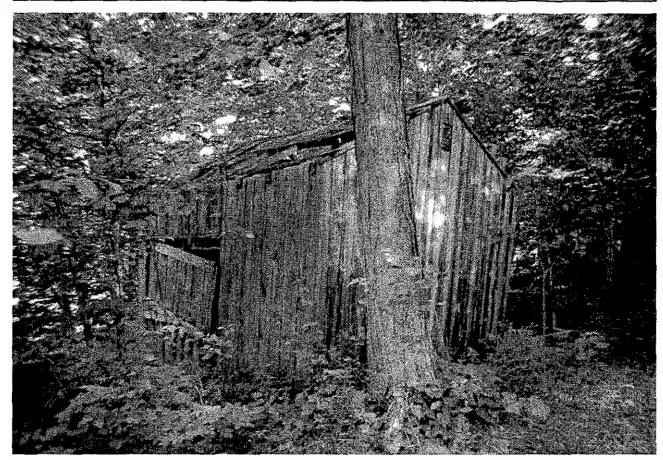


Figure 4.27. Manitou Island Association orchard workers' cabin, 1996. The three cabins standing along the eastern shore road are nearly identical in appearance. The repetitive, standardized design reflects the anonymous role that transient, itinerant workers played in commercial fruit operations like that of the MIA. The cabins further represent the radical social and economic transformation that occurred on the island during the 1930s and 1940s. During that time, the U.S. Coast Guard station and the lighthouse were closed, the Bournique, Anderson, and Maleski families abandoned their farms, and the MIA acquired even more island property. All of the surviving orchard workers' cabins are deteriorating due to lack of maintenance.

Contributing Landscape Features

Shoreline Road

South Cherry Orchards

Landing Strip

Black Locust Grove/Windbreak

North Cherry Orchard

Maple-Beech-Aspen Woodland

Apple Orchard

Contributing Structures

Cabin #1 (Ruin)

Structure Number: 53122899

Dimensions: 12'0" x 12'-2"

Walls: vertical board and batten

Roof: none

Cabin #2

Structure Number: 53122899

Dimensions: 12'-2" x 14'-0"

Walls: vertical board and batten

Roof: gable; composition roof paper

Cabin #3

Structure Number: 53122899

Dimensions: 12'-2" x 12'-1"

Walls: vertical board and batten

Roof: gable; composition roof paper

Cabin #4

Structure Number: 53122899

Dimensions: 12'-0" x 12'-2"

Walls: vertical board and batten

Roof: none

Manitou Island Association West-Side Farm / Crescent Townsite

E 1/2, Section 7, T-31N R-15W

History and Agricultural Data

This site, used by the MIA as the base of its west-side agricultural operations, was first farmed by Peter Swanson and his brother John Swenson, both of whom emigrated from Sweden during the mid-1880s. They purchased 240 acres of land along the western shore of North Manitou Island near the site of the abandoned lumber town of Aylsworth. The two brothers shared a house, and together purchased livestock, cleared land, and constructed a barn and fences (figure 4.28). John, who chose to spell his name "Swenson," built a boat for fishing and transporting goods to and from Leland. Peter worked for Silas Boardman as a carpenter and blacksmith. According to Rita Hadra Rusco, John later moved to the eastern side of the island where he engaged in farming and logging.³⁰

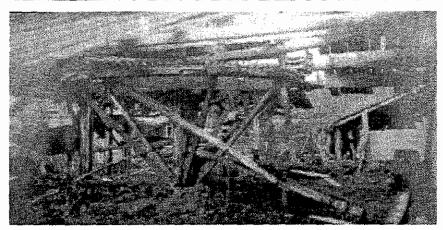
The 1900 population census of North Manitou Island lists Peter "Swenson," born November 1861, age 38. He had been married for three years to his wife Mary, who was born in 1873. According to the census manuscript, Peter had immigrated from Sweden in 1885, and was a nationalized U.S. citizen. Mary had immigrated from Norway in 1895. Two children lived with them: Peter M., born in February 1898 in Michigan, and Theobalda, born in June 1892 in Norway—three years before Mary's immigration, and five years before her marriage to Peter. John Swenson does not appear in the 1900 census of North Manitou Island.³¹

³⁰ Rusco, North Manitou Island, 60.

³¹ U.S. Census Office, "Twelfth [1900] Census of the United States—Population," microfilm copy of manuscript schedules, State Historical Society of Wisconsin, Madison.

Figure 4.28. A "homemade threshing machine" on the farm of Peter Swanson, ca.

1900.



In 1906, Peter Swanson leased part of his North Manitou property to the partnership of Franklyn H. Smith and William C. Hull of Traverse City. On this parcel, the Smith & Hull Lumber Company developed the lumber camp known as "Crescent." The complex included a saw mill, several commercial and quasi-public buildings including a school, post office, hotel, dock, and housing for workers. Construction of the dock began in 1907, and the mill, operated by A. J. White and Son, began functioning in the fall of 1908. A narrow-gauge railroad carried logs from Smith & Hull's's land holdings in the northwestern portion of the island to Crescent.32 The company used some of the cleared land surrounding the camp and the Swanson farmstead to produce food for its workers and draft animals, and for a small dairy herd and other livestock. 33 Several barns and other agricultural buildings were erected at the site. Historic photographs of Crescent depict several large barns with lower walls constructed of vertical logs.34

In 1915, following the depletion of harvestable timber on its island lands, the Smith & Hull Lumber Company abandoned the Crescent lumber camp. The townsite was entirely deserted by the time biologist Robert Hatt visited the site in 1916. 35 Soon thereafter the structures were dismantled, with some of the materials possibly recycled by island residents into other buildings (figure 4.29). Peter Swanson may have discontinued his own farming activities on North Manitou Island during the Smith & Hull lumbering period. The 1910 federal census of population for Leland Township lists Peter Swenson, 49, from Sweden, who was naturalized in 1881. He claimed no occupation, lived with his wife Mary, his son Enos (age 12), and daughter Eva D. 36 Peter, Mary, and Eva Swanson moved to Traverse City in 1917. Enus, who was employed by Peter Stormer, remained on the island. 37

The Crescent townsite eventually was acquired by the Manitou Island Syndicate, forerunner of the Manitou Island Association, which constructed a large barn there sometime during the early 1920s. From information given in an interview with Mrs. Eleanor (Anderson) Oien, National Park Service historian David L. Fritz inferred that the western side barn predated the lumbering town of Crescent.³⁸

³² Rusco, North Manitou Island, 96-97, 123.

³³ David L. Fritz, "Swanson Barn," Draft National Register of Historic Places Registration Form, 22 September 1987, Sleeping Bear Dunes National Lakeshore, Empire, Mich.

³⁴ The historic photograph collection of the Leelanau Historical Museum includes several good views of agricultural and other buildings at Crescent. Numerous buildings appear to have utilized vertical log wall construction. The first documented example of this construction technique on North Manitou may be the residence of Alvar and Mary Bournique, which was built by Nicholas Feilen. Perhaps Feilen, who resided on the island during the development of Crescent, also was involved in the construction of the lumber camp buildings.

35 Robert T. Hatt, J. Van Tyne, L. C. Stuart, C. H. Pope, and A. B. Grobman, Island Life: A Study of the Land Vertabrates of the Islands of Eastern Lake Michigan (Bloomfield Hills, Mich.: Cranbrook Institute of Science, 1948), 43.

³⁶ U.S. Department of Commerce, Bureau of Census, "Thirteenth [1910] Census of the United States—Population," microfilm copy of manuscript schedules, Library of Michigan, Lansing. Most likely, the naturalization date is an error, since 1881 is four years prior to Swanson's immigration to the United States.

Rusco, North Manitou Island, 102-103,
 69.

³⁸ Fritz, "History Data Report," 82; Fritz, "Swanson Barn." The barn was considered eligible for inclusion in the national register because of its association with the logging activities at Crescent.

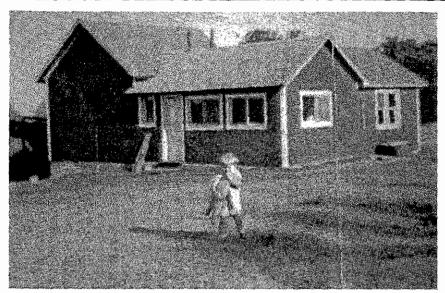


Figure 4.29. Crescent "meat market" and "barber shop," ca. 1940. The structures depicted in the background of this photograph allegedly were part of the crescent lumber camp, where they functioned as a meat market and a barber shop. Both structures apparently were utilized and maintained by the MIA, which owned the property when this photograph was taken.

Although historic photographs indicate that a large, wood-frame, gambrel-roofed barn did exist at the townsite during its heyday, the design of that building differed significantly from the current structure. If the barn portrayed in photographs of Crescent is indeed the currently existing barn, then it has been substantially remodeled and, judging from the surrounding terrain, probably also relocated.

The current structure probably was built after the demise of Crescent, but prior to the mid-1920s. According to Rusco, the west-side barn was built around 1925 by the Manitou Island Syndicate to support its beef cattle endeavor.³⁹ None of the expenses recorded in the MIA accounts journal for autumn 1924 through 1929 can be attributed directly to construction of the west-side barn. However, an entry in the Manitou Island Association accounts journal during autumn 1924 indicates that the MIA paid Martin Haeft \$251.25 for "painting buildings west side." Perhaps the west-side barn was built during the spring or summer of 1924, just prior to the period covered by the surviving MIA expenses ledger.

The MIA's west-side farming operation focused on beef cattle. Peter Oien managed the west-side farm for the MIA (figure 4.30). He and his family lived in the house originally built and occupied by Peter Swanson and John Swenson.⁴¹ The Oiens also raised corn and hay, and had a family garden for their own use. According to Giles Merritt, the MIA utilized the west-side fields for hay, corn, potatoes, and some fruit trees. He estimated that during the 1920s about twenty-five acres were planted with hay and corn, and another three acres were devoted to potatoes. The west-side operation also included several milk cows, chickens, and hogs.⁴² Jean Lundquist recalled that during the late 1930s and 1940s the west-side farmstead included the former Swanson/Swenson house, the large MIA barn, a pig sty, and a chicken coop, the latter two located north of the barn. A couple of "old machinery sheds" were located near the abandoned Crescent dock.⁴³

³⁹ Rusco, North Manitou Island, 96.

Manitou Island Association Accounts Journal.

⁴¹ Fritz, "History Data Report," 28; Fritz's source is Giles E. Merritt.

⁴² Giles E. Merritt, untitled manuscript, 11 February 1986; Fritz, "History Data Report," 28.

⁴³ Lundquist, interview.



Figure 4.30. Peter Oien family, ca. 1940. Peter Oien was employed by the MIA during the 1920s, and may have begun his employment with the association's forerunner, the Manitou Island Syndicate. While Peter was employed by the MIA as a farm manager, the Oiens resided at the west-side farm during the summer months. The large barn shown in the background of this photograph was the primary structure of the MIA's west-side farming operation. This photograph depicts the building not long before the MIA began curtailing agricultural production on the island. Soon thereafter. the MIA ceased harvesting hay from the large clearings scattered throughout the western and southern portions of the island, and utilized the barn primarily to store winter feed for the MIA deer herd.

After the Angell Foundation discontinued most of the MIA's island agricultural activities during the early 1950s, the barn was primarily used for storage and to provide shelter for deer hunters during inclement weather. 44 When Rita Hadra Rusco arrived on North Manitou in 1942, the Swanson/Swenson house was vacant but in good repair. Peter and Eleanor Oien moved to the mainland in 1945. 45 A 1953 insurance evaluation of the site indicated that the barn was used for feed storage. Three other structures on the site, one of which likely was the Swanson/Swenson farmhouse, were listed as "uninsurable." The deserted farmhouse was bulldozed in the mid-1970s, the last house to be demolished by the MIA. 47

Location and Landscape Setting

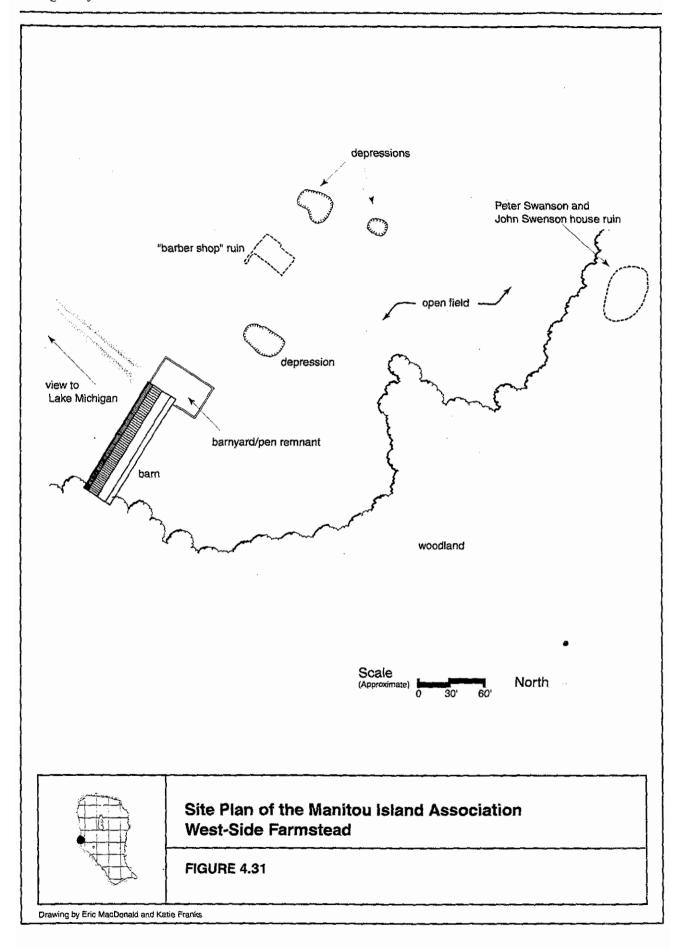
The MIA west-side farm is situated in the west-central portion of the island, less than one-half mile from Lake Michigan. Nearly four miles west of the village, the farm is reached via a roadway that traverses the island from a location just north of the "south orchard" on the eastern shore road. The farm clearing is nearly a mile long from north to south, and a half-mile wide. A smaller, irregularly-shaped clearing known as the "big field" is located south and slightly upland of the main cleared area, screened from view by a narrow strip of woodland. The primary farm clearing offers spectacular views of Lake Michigan and South Manitou Island. The terrain slopes gradually downward toward the lakeshore, where it is then broken by a strip of highly irregular, rounded dune formations, and active dunes along the coast. The vegetation of this area includes several showy wildflowers, including yarrow (Achilles millefolium), common St. John's-wort (Hypericum perforatum), and common milkweed (Asclepias syriaca), all of which bloom during mid-summer.

⁴⁴ David L. Fritz, "Swanson Barn."

⁴⁵ Rusco, North Manitou Island, 76, 95; "N. Manitou Native Dies at the Age of 95," Leelanau Enterprise, 22 August 1996. Eleanor Oien was the daughter of North Manitou Island pioneers Mads and Gertrude Nerland. She married Peter M. Oien in 1921. Peter died in 1973, and Eleanor died in 1996.

[&]quot;Detroit Insurance Agency, "Manitou Island Association, North Manitou Island, Michigan."

⁴⁷ Rusco, North Manitou Island, 95, 13.





The MIA west-side barn is located in the extreme southeastern corner of the large clearing, its southern end positioned at the edge of the woodland and the base of a small hill (figure 4.31). The site of the former A. J. White and Son mill is visible several yards northwest of the barn, where the lower terrain and vegetation becomes very marshy. This small wetland constitutes the remains of the holding pond for the mill, into which hot water once was pumped to wash away snow, sand, and gravel from logs before they were milled (figure 4.32).⁴⁸ Concrete piers and foundation remnants mark the location of the sawmill. Three apple trees are located north of the relict mill pond area.

Located several yards northeast of the barn is a structural ruin referred to as "the barber shop" (figure 4.33) This structure is presumed to have been part of the Crescent lumber camp. According to Rusco, the building functioned as the town meat market. It had a walk-in cooler, and an attached icehouse and barber shop. ⁴⁹ A ca. 1940 photograph shows the structure to be well-maintained and in good condition, suggesting that it was utilized as part of the MIA west-side farming operation.

Apparently, the barber shop ruin was in better condition at the time of 1994 List of Classified Structures (LCS) survey, which indicated that it was a cross-gable structure with drop siding and a wood shingle roof, measuring 14'-4" by 25'-0." It has now almost completely collapsed. An automobile inside the structure, which is currently buried beneath debris, suggests that a portion of the

Figure 4.32. Site of the former A. J. White & Son sawmill, Crescent townsite, 1996. Concrete foundations mark the former location of the sawmill; the long-abandoned mill pond remains visible in the landscape as a large wetland located directly west of the MIA barn.

⁴⁸ Rusco, North Manitou Island, 96.

⁴⁹ Ibid.

⁵⁰ List of Classified Structures, field notes, Summer 1994, National Park Service, Midwest Support Office, Omaha, Nebraska.

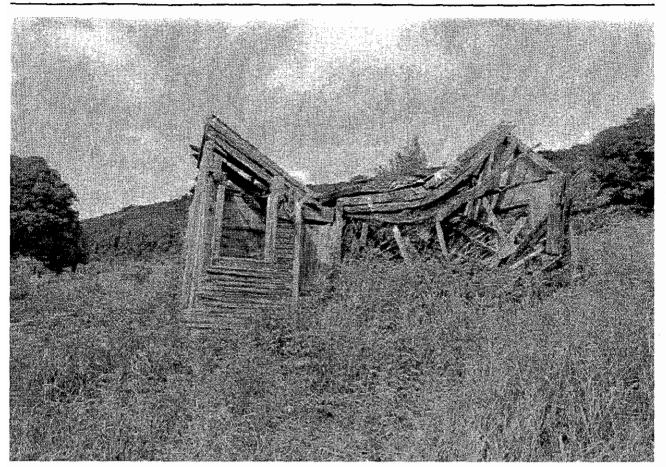


Figure 4.33. "Barber shop," Crescent townsite, 1996.

building formerly was used as a garage. The automobile may be either a 'Beacon' or 'Ace'—models that were manufactured by Continental Motors during 1933-1935. There are at least three other noticeable depressions in the vicinity of the barber shop. These may be locations of buildings formerly associated with the Swanson farm or the Crescent lumber camp. Farther to the northeast, barely within the edge of the woods, are the remains of the Peter Swanson house, which was bulldozed by the Manitou Island Association. It is now merely a pile of wood and debris.

Buildings and Structures

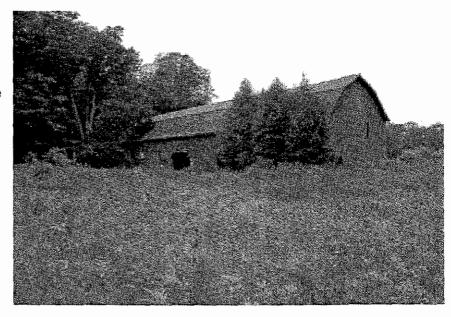
The MIA west-side barn is positioned with its long axis aligned southwest/northeast. The barn has a gambrel roof with flared eaves. It is clad with vertical board siding and corrugated sheet-metal roofing (figures 4.34 and 4.35). Most of the foundation is cast concrete, except for a portion of the northwestern wall, which is fieldstone with cement mortar. A concrete wing wall extends outward from the northeastern end of the building, but there is no obvious evidence to suggest whether this wall once supported a structure of some sort.

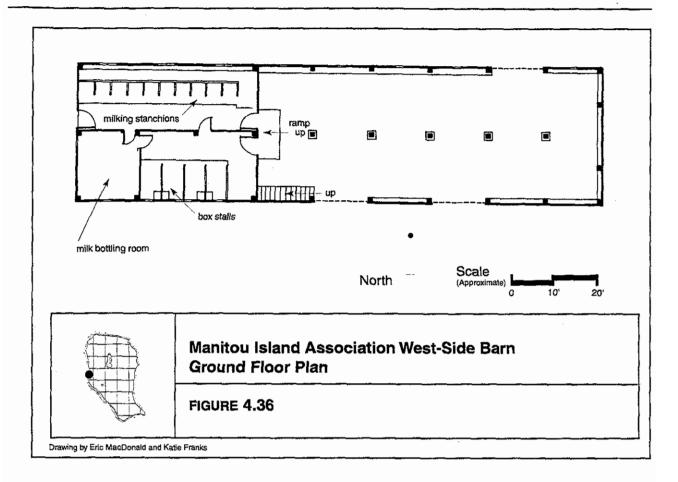
The barn has nine structural bays (figure 4.36). The northeastern two-thirds of the lower floor is open and has a dirt floor. The southwestern third has a concrete floor, with the space divided between wooden box stalls, and a series of milking stanchions that



Figure 4.34. Manitou Island Association west-side barn, northern and western facades, 1996. The barn is the largest agricultural building on North Manitou Island.

Figure 4.35. Manitou Island Association west-side barn, eastern and southern facades, 1996. The barn is a prominent landscape feature of the west-side farm clearing and Crescent townsite, and dramatically frames westward views of Lake Michigan.





accommodated ten cows (figure 4.37). Like the east-side MIA barn, the lower portion of the west-side barn has a heavy timber structure made up of circular-sawn wooden posts and girders, and peeled log beams. Above, the barn has a plank-frame structure that is based on the Shawver truss system. Physical evidence suggests that the large upper loft, which extends across the full length of the structure, was used for hay storage, and the space below housed animals. The barn has a large door at the southern end for loading hay.

Contributing Landscape Features

Meat market/barber shop ruin and automobile

Earthen depressions

Peter and John Swanson/Swenson House ruin

Fence posts and woven wire fence

Concrete foundation (barnyard)

Mill pond

Concrete foundation and piers (A. J. White mill)

Apple trees (3) north of pond



Figure 4.37. Manitou Island Association west-side barn, milking stanchions, 1996. The floor plan, materials, equipment, and interior finishes of the MIA barn conform to standards promulgated during the 1910s and 1920s by the U.S. Department of Agriculture and the extension programs of state agricultural colleges.

Contributing Structures

Barn

Structure Number: 53122830

Dimensions: 132' x 33'

Foundation: concrete; fieldstone

Walls: vertical boards

Roof: corrugated sheet metal

Alvar and Mary Bournique Farm

NE 1/4, NW 1/4, Section 22, T-31N R-14W

History and Agricultural Data

The farm built by Colonel Alvar L. and Mary Bournique was the most elaborate private resort developed on North Manitou Island during the twentieth century (figures 4.38 and 4.39). Alvar Bournique (b. 1866) married Mary McMunn (b. 1883) in 1901. Together they operated a dance instruction school founded by Alvar Bournique's parents in Chicago in 1867. The Bourniques owned additional dance studios in Waukegon and Lake Forest, Illinois, and Milwaukee, Wisconsin. 52

On 3 July 1903, Alvar Bournique filed a homestead entry for 152.20 acres of land described as E½ NW¼, NE¼ SW¼ and Lot #5, Section 22, T31N R14W. The final proof was entered on 13 October 1908. In his 1908 testimony, Bournique claimed to have settled on the property on 25 October 1903. He built and occupied a 32' x 42' log house in 1904. Additional improvements included a second dwelling, an ice house, a barn, chicken coop, tool shed, laundry, fences, and wells (figure 4.40). These improvements were valued at \$4000. Bournique testified that he resided at the farm with his wife and two children, and stated that he had "never been absent beyond the time limit accorded and only in account of business." While he was away, the farm operations were continued by his wife and employees. The soil was light sand and clay, covered with second-growth timber. He cultivated approximately ten acres the first year, "planted to orchard first season three acres, and increased each year amount cultivated about five acres." In 1907 Bournique cultivated approximately thirty-three acres, and in 1908, he had approximately thirty acres under cultivation. Bournique's witnesses were John Paetschow, age 25, and Fred Samuelson, age 37. Other witnesses were Nick Feilen and John Anderson.⁵³ Two years later, at the time of the 1910 census, the Bourniques were listed as residents of North Manitou Island. They had two daughters, Elizabeth, age 7, and Mary L., age 3.54

The Bourniques continued their Chicago-based dancing school business, running their North Manitou Island farm "by remote control," and coming to the island for summer vacations. They increased their island property holdings to 400 acres and continued the farming operation until 1925. Giles Merritt recalled that during the mid-1920s the Bourniques spent May through September at their island home. The household included Alvar and Mary Bournique, their two daughters, and Mary Bournique's mother, Mrs. William Northrup McMunn. Friends and extended family members visited for shorter periods during the summer, often arriving on the steamship *Puritan* from Chicago, which stopped at several ports on the eastern shore of Lake Michigan. 57

⁵¹ U.S. Department of Commerce, Bureau of Census, "Thirteenth [1910] Census of the United States—Population;" "People You Know - Or Do You?," Leelanau Enterprise-Tribune, 28 March 1957, n.p.

⁵² Fritz, "History Data Report," 83-84.

⁵³ Homestead Application #11080, Serial #022; Final Certificate (Patent) #62772, National Archives and Records Administration, Washington, D.C.

⁵⁴ U.S. Department of Commerce, Bureau of Census, "Thirteenth [1910] Census of the United States—Population."

^{55 &}quot;People You Know - Or Do You?," Leelanau Enterprise-Tribune, 28 March 1957, n.p.

⁵⁶ Giles E. Merritt, untitled manuscript, 11 February 1986.

⁵⁷ Giles E. Merritt, "U.S. Coast Guard N. Manitou Isl. Events 1925-28."

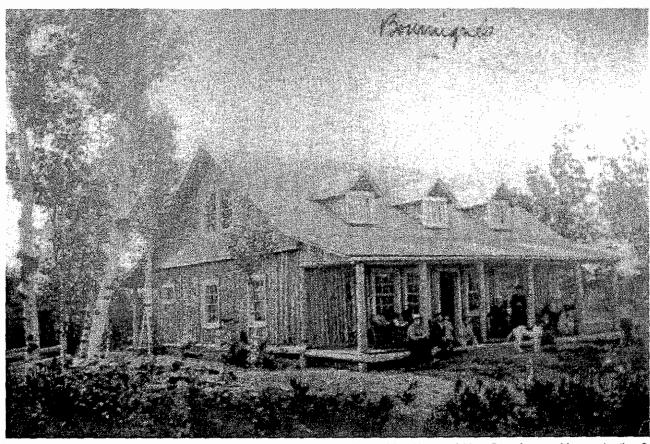


Figure 4.38. Alvar and Mary Bournique residence shortly after construction in 1903.



Figure 4.39. Alvar and Mary Bournique at their North Manitou Island summer home, ca. 1928. The Bourniques resided in Highland Park, Illinois.

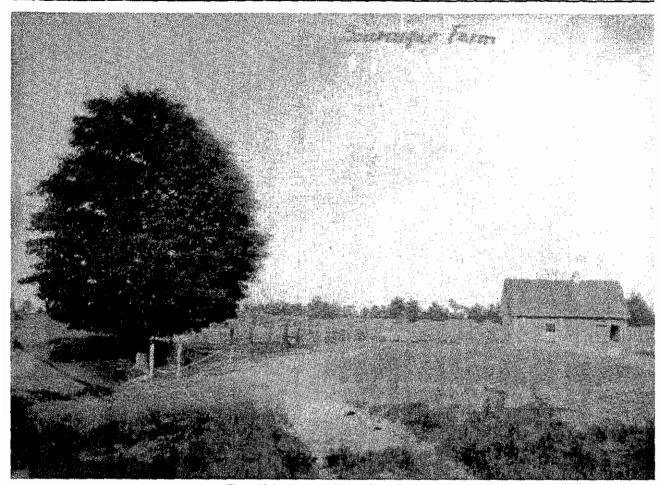


Figure 4.40. Alvar and Mary Bournique farm, ca. 1910. The structure in this photograph may be one of several buildings that once stood on the Bournique farmstead.

The Bourniques employed island residents to tend to various household and farm chores, including housekeeping, cooking, laundering, and gardening.⁵⁸ John and Ildri Anderson operated the farm and served as year-round caretakers of the property.⁵⁹ The Bourniques also hired MIA employees for farm labor, rented a saddle horse for the summer season, and purchased ice, milk, and hay from the MIA.⁶⁰

In 1938 the Bourniques sold their dance school and moved to Leland. Following Alvar's death that same year, Mary Bournique continued to reside in that mainland community.⁶¹ The Bournique's North Manitou house was last occupied in 1941. Mary Bournique visited the property each summer between 1942 and 1946; during these visits, however, she stayed in the MIA lodge.⁶² Ownership of the North Manitou property passed to Mary Bournique's daughter and son-in-law, Mr. and Mrs. Wilbur Munneke. At their meeting on 1 October 1955, the board of trustees of the Angell Foundation agreed to offer the Munnekes \$20,000, to be paid over a three year period, in exchange for title to the property. The Munnekes agreed to this plan in April 1956, and the Angell Foundation acquired the title in 1959.⁶³

⁵⁸ Fritz, "History Data Report," 83.

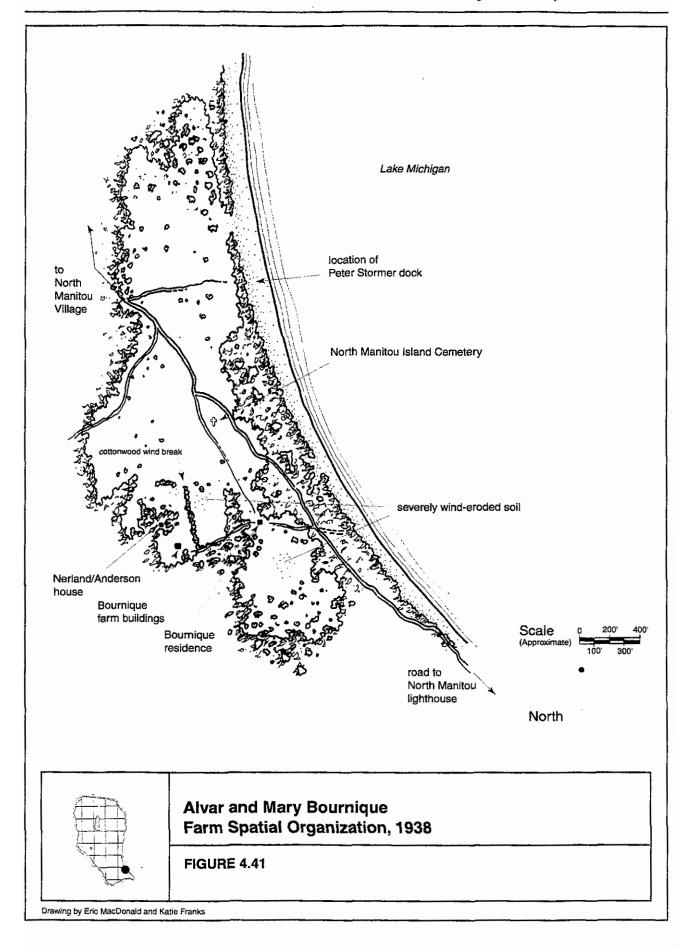
⁵⁹ Rusco, North Manitou Island, 59.

⁶⁰ Giles E. Merritt, "U.S. Coast Guard N. Manitou Isl. Events 1925-28;" Manitou Island Association, Accounts Journal.

^{61 &}quot;People You Know - Or Do You?," Leelanau Enterprise-Tribune, 28 March 1957, n.p.

⁶² Rusco, North Manitou Island, 59.

⁶³ Memorandum, [W] Craig Keith to [Board of Trustees, William R. Angell Foundation], 31 December 1976, Angell Foundation Collection, Sleeping Bear Dunes National Lakeshore, Empire, Mich.



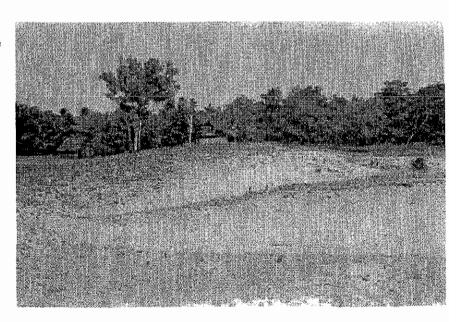
Location and Spatial Organization

Cultural resources associated with the Bournique homestead are located in the extreme southeastern portion of the island, approximately three miles south of North Manitou Village. The buildings are grouped into two clusters amidst a complex and somewhat amorphous network of open spaces that also includes the island cemetery (figure 4.41). The Bournique house and its associated outbuildings are located in an area of old dunes approximately one-quarter-mile west of the Lake Michigan shore. The remains of the Bournique's barns and other farm buildings are located approximately one-quarter-mile farther west.

Landscape Setting, Residence Cluster

The Bournique house is situated near the Lake Michigan shore in a clearing characterized by semi-stable sandy dunes (figures 4.42 and 4.43). The house is perched on the crest of an old dune, a site that offers views of the Manitou Passage and the Michigan mainland through a screen of trees along the beach. From the grand front porch of the Bournique house one still can catch glimpses of the Manitou Passage, and hear the waves of Lake Michigan lapping against the shoreline. The terrain between the house and lakeshore is gently undulating and sparsely vegetated with old field and native dune plants, including scattered juniper shrubs (Juniperis communis), Artemisia caudata, Arabis lyrata, and Pitcher's thistle (Cirsium pitcheri), a protected species. In some places, partially-buried fence posts and woven wire fence protrude from the dunes. To the north and west, the rear of the homestead complex is framed by a woodland of sugar maple, beech, aspen, and paper birch (Betula papyrifera) trees. A narrow roadway leads from the homestead buildings westward into the woodland. This road connects the house site with the remnants of the farm buildings (figure 4.44).

Figure 4.42. Alvar and Mary Bournique residence, landscape setting, 1996. The Bournique residence is situated amidst a landscape of old dunes.



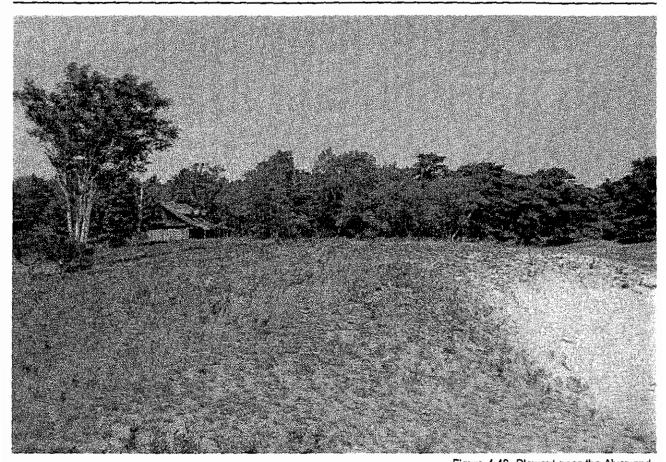




Figure 4.43. Blowout near the Alvar and Mary Bournique residence, 1996. The mobile ridges and hollows of sand created at the Bournique property by strong offshore winds are suitable environments for Pitcher's thistle (Cirsium pitcheri), a federally protected species.

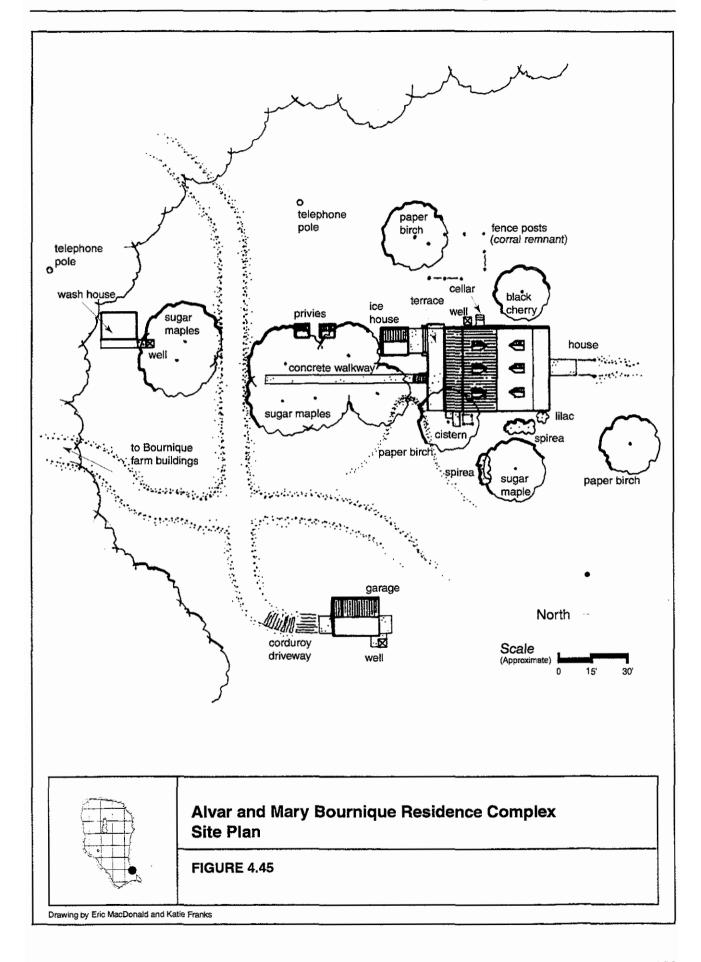
Figure 4.44. Relict roadway connecting the Bournique residence and farm buildings, 1996. The Bournique farm buildings were located several hundred feet west of the house and its associated outbuildings. The view of the farm cluster from the house is screened by a narrow stand of woodland vegetation.

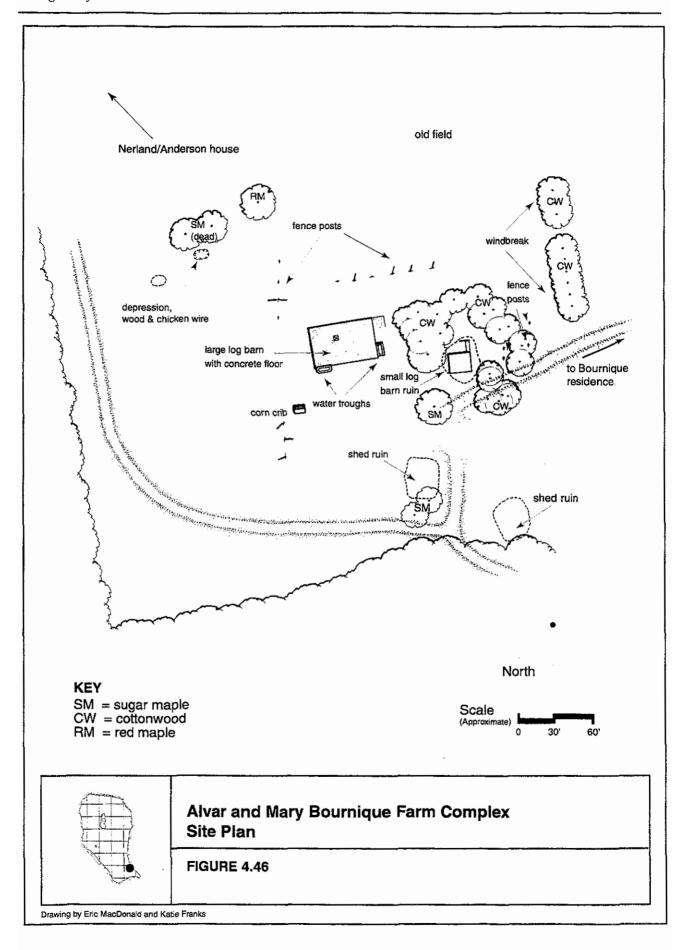
The main entrance of the Bournique house faces eastward toward the Manitou Passage (figure 4.45). The family probably enjoyed many spectacular sunrises from the broad porch that fully extends across the front of their summer home. Several large paper birch trees and one black cherry (Prunus serotina) tree are scattered in the vicinity of the house. The Bourniques may have planted these trees, or simply allowed natural volunteers to remain in these locations. Relict ornamental vegetation include a lilac shrub at the southern end of the front porch, and two groupings of spirea shrubs south of the house. Near the southern wall of the house there is a wooden support structure for a large cistern that once collected water from the roof of the house. Directly north of the house are the remnants of a horse corral, consisting now of some scattered fence posts and woven-wire fence on the ground surface.

From the rear porch, a concrete terrace extends westward across the full breadth of the building. A narrow concrete walkway, lined with sugar maple trees, extends outward along an axis perpendicular to the terrace. Four outbuildings are arranged along this walkway. The largest of these, a two-story, gable-roofed ice house, is located nearest to the house. Farther west are two gable-roofed privies. At the end of the walkway is a concrete-lined well, and the collapsed wooden structure of a wash house. Aligned with the end of the concrete walkway, a boardwalk extends alongside the former wash house. Located several yards southwest and downslope from the residence is the Bournique's automobile garage. There is a concrete pad at both the front and rear garage doors, and a corduroy driveway, now partially buried by sand, extends westward from the rear door.

Landscape Setting, Farm Cluster

The remains of the Bournique farm buildings are clustered approximately one-quarter-mile from the house and its associated outbuildings (figure 4.46). Open fields are located north of the Bournique farm complex, which is accessed by a road that extends from the house. The former fields are delineated by a cottonwood windbreak that extends northwestward from the grouping of farm buildings (figure 4.47). Two apple trees are located within this clearing, but otherwise the area is devoid of woody vegetation. Open land also extends southwestward from the barns, bounded by a dense sugar maple and beech woodland. The clearing is bisected by a line of old fence posts and wire fence. A roadway passes through the farm complex to the John and Ildri Anderson homestead, which is located adjacent to the northwestern corner of the Bournique clearing. Visually, the Anderson homestead appears to be part of the Bournique farm complex. There is a small depression located in the northwestern corner of the Bournique clearing, near the Anderson homestead. Nearby is a pile of wood, which may be the remains of another structure.





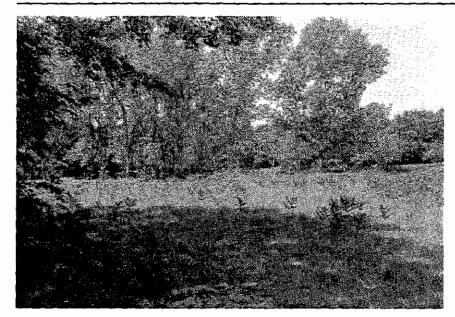
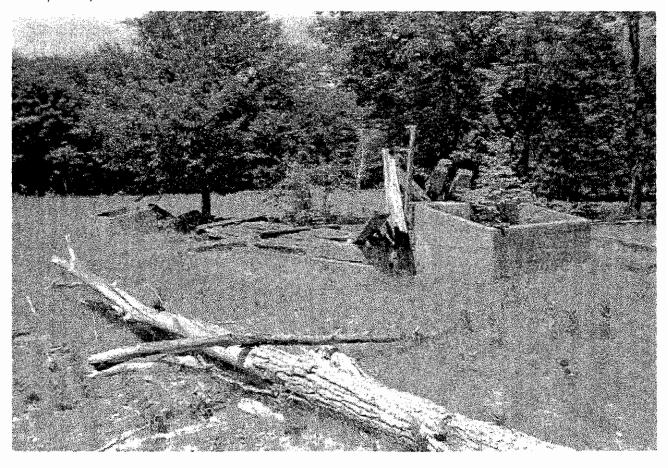


Figure 4.47. Cottonwood windbreak, Alvar and Mary Bournique farm, 1996. A solitary row of cottonwood trees marks the boundary between field and pasture areas at the Bournique farm. The cottonwoods most likely were an attempt to reduce erosion of the farm's thin, sandy soils. Today the clearings in and around the Bournique farmstead contain numerous unvegetated, windblown patches of sand.

Figure 4.48. Concrete water troughs and foundation of large log barn, Alvar and Mary Bournique farm, 1996.



The largest structure, a log barn, was located north of the road that connects the complex to the Bournique homestead. According to Rusco, this barn contained a dance floor on the upper level. The building was connected to the Bournique house by a wooden plank walkway.⁶⁴ All that currently remains of this building is a cast-concrete platform upon which are strewn the remnants of the barn's log walls (figure 4.48). The walls appear to have consisted of squared logs stacked upon each other and nailed together to form modules that were then spiked into vertical posts made of several 2" x 10" boards. There are two concrete water troughs connected to the barn foundation, one located at the southwestern corner, and the other at the southeastern corner. Located several feet southwest of the barn foundation is a small corn crib, the only structure that remains fully standing in this cluster of abandoned farm buildings.

The remains of a smaller log barn (figure 4.49) are located a few yards east of the large barn ruin. This small log barn was standing when Shunichi Hagiwara surveyed the site in 1979. The structure had a log base supporting a shingle-clad, gable-roofed loft. There was a shed-roofed, lean-to addition on the southern face of the structure.65 The barn also was still standing when the LCS inventory was completed during the summer of 1994; however, in 1996 the upper portion of the structure was collapsed, leaving only the lower portion of the log walls standing. The lower walls are made of large, hewn logs, and the corners have full dovetail notches (figures 4.50 and 4.51). A large sugar maple tree is located only a few feet south of this ruin, and volunteer cottonwood trees have spread into the area. Two large piles of building debris are located south of the roadway, roughly opposite the small log barn. One of these formerly was a gableroofed, board-and-batten structure that remained extant at the time of Hagiwara's survey.66



Figure 4.49. Small log barn ruin, Alvar and Mary Bournique farm, 1996.

⁶⁴ Rusco, North Manitou Island, 59.

⁶⁵ Hagiwara, "Building-Structure Inventory."

⁶⁶ Ibid.



Figure 4.50. Small log barn ruin, Alvar and Mary Bournique farm, 1996. The lower walls of this small barn were constructed of large, hewn timbers with full dovetail corner notching.

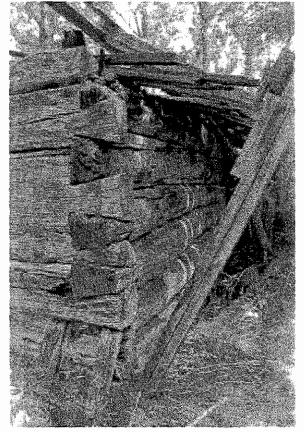


Figure 4.51. Corner detail, small log barn ruin, Alvar and Mary Bournique farm, 1996. The dovetail corner construction technique results in a strong stable corner joint. The technique is not highly unusual, but it is somewhat uncommon in the upper Midwest.



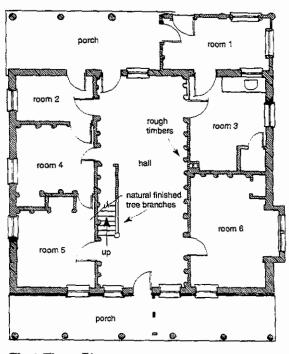
Figure 4.52. Alvar and Mary Bournique residence, front (eastern) elevation, 1996.

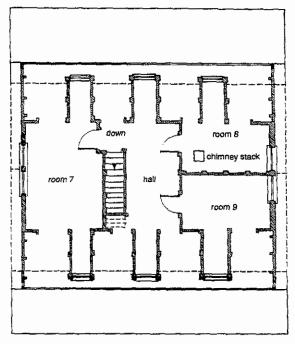
Buildings and Structures, Residential Chuster

The architectural form and plan of the Bournique house strongly resembles Creole domestic architecture in Louisiana (figures 4.53 and 4.54). The structure is a large story-and-a-half house with vertical log walls, that mimic the French colonial poteaux sur solle construction technique. The gables have clapboard siding. The house has broad galleries extending across the east- and west-facing elevations, and a broken-pitch gable roof (figures 4.52 and 4.55). A wooden, centrally-placed stairway leads up to the front porch. Like many large vernacular dwellings in the American South, the house is oriented to take advantage of prevailing breezes, with front and rear galleries connected by a central hall. The first floor of the Bournique house has a central hall. The first floor of the Bournique house has a central hallway with a stair, and rooms stacked on either side. One corner of the rear porch is enclosed, much like a Creole cabinet. The room arrangement of the upper floor consists of three bedrooms grouped around a central hall.

The Bournique house design clearly is not a conscious attempt to accurately replicate an authentic Creole vernacular dwelling. However, it does exhibit several characteristics, both in external form and appearance, that are typical of such houses. The most noteworthy departure from early, archetypal Creole cottages is the double-pile, central hallway plan of the Bournique house. However, the room arrangement of the Bournique residence may be related more closely to later derivations of Creole house plans, especially those of early-

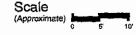
⁶⁷ Historic American Buildings Survey, sketch plans, Sleeping Bear Dunes National Lakeshore, Empire, Mich.; David L. Fritz, "Bournique Summer Home," Draft National Register of Historic Places Registration Form, 10 September 1987, Sleeping Bear Dunes National Lakeshore, Empire, Mich.





First Floor Plan

Second Floor Plan



Sources: Derived from Historic American Buildings Survey Field Notebook, 1988 (Empire, Mich.: Sleeping Bear Dunes National Lakeshore); Eric A. MacDonald, Field Investigations, 1997.

North ---



Sketch Plan of the Alvar and Mary Bournique Residence

FIGURE 4.53

Drawing by Eric MacDonald

Creole House Forms

"Creole" is a term applied to an entire cultural complex centered in the Gulf of Mexico coastal areas and the lower Mississippi River. Anthropologist Jay Edwards notes that the word initially referred to a person "derived from Old World parentage, European or African, but raised in, and acclimatized to, an American tropical environment such as the West Indies or Louisiana." However, "Creole" now applies to the "mixed cultural elements" of the French, Spanish, and African colonists of the Gulf Coast, including vernacular architecture, foodways, and dialects.

Creole settlers developed distinctive forms of domestic architecture during the eighteenth and nineteenth centuries. Early Creole houses were built using simple construction techniques, such as poteaux en terre (vertical posts placed side-by-side in an earthen trench). Later, during the first decades of the eighteenth century, the poteaux sur solle method (vertical posts mounted on a heavy timber sill) became popular in the area around New Orleans. Spaces between the wall posts were filled with bousillage—a mixture of mud, lime, and Spanish moss. The poteaux and bousillage wall assemblage usually was covered with wood clapboards.

The archetypal Creole cottage, which evolved during the first several decades of the eighteenth century, incorporated several distinctive design elements that were especially well-suited to the warm, humid Gulf Coast climate. The structures typically were raised above grade level, often a full story above the ground surface. The principal dwelling spaces were located on the better-ventilated upper level. Creole houses also typically included full-length galleries, or porches, which spanned the front facade of the structure. Later examples were surrounded on all four sides by broad galleries. The gallery roofs were supported by wooden colonettes, which sometimes were mounted on heavier masonry piers. The low-pitched gallery roofs intersected the steep roof of the core of the house, producing either gable or hip roof forms that were sharply broken in pitch.

In plan, early Creole cottages typically were one-and-a-half rooms deep, and two or three rooms wide. These simple plans lacked interior hallways and stairs. Instead, full-width galleries served to connect the various rooms and floor levels. All of the main rooms of the house were of equal depth, but varied in width according to their relative social importance. The base module consisted of two asymmetrical rooms—salle and chambre. These two rooms most often were heated by a common chimney with back-to-back hearths. Most substantial Creole cottages also had a range of smaller spaces at the rear of the house—a semi-enclosed gallery, or loggia, which separated two smaller storage or sleeping rooms, or cabinets. The main rooms of the house opened directly onto the gallery or loggia via full-height, double "French" doors.

After the settlement of New Orleans, trained military engineers began applying their skills to the design of domestic buildings. The organic plans typical of early Creole vernacular architecture increasingly gave way to more sophisticated room arrangements, some of which incorporated interior hallways and staircases. Facades became more symmetrical, with elements located according to axial relationships. The most popular symmetrical floor plan adopted by Spanish and French colonists consisted of a large central salle flanked on either side by narrower rooms of equal width. After the American revolution, an influx of Anglo-American settlers into the region further influenced the evolution of Creole house plans. Some builders adopted a non-symmetrical "hall and parlor" core with end-wall external chimneys, an arrangement typical of Anglo-American dwellings in the Mid-Atlantic and Southeastern states. Other typical Creole elements were retained, however, including the full-length front gallery, rear cabinet and loggia range, and gabled-end roofs with broken pitches.

During the mid-nineteenth century, most new Creole and Anglo-French houses were small, private residences, slave quarters, or urban and summer cottages. The Creole house type experienced a revival during the lumbering boom, which began in Louisiana after 1870. Regionally, the Creole form remained popular into the early years of the twentieth century, especially around the Gulf Coast resort communities of Mobile, Alabama, and Biloxi and Ocean Springs, Mississippi. In these areas, residents from New Orleans adapted the Creole form to small vacation houses which had front galleries and four-square plans.

Sources: Fred B. Kniffen and Sam Bowers Hilliard, Louisiana, its Land and People, rev. ed. (Baton Rouge: Louisiana State University Press, 1988), 129-135; Jay D. Edwards, "The Origins of the Louisiana Creole Cottage," in Michael Roark, ed., French and Germans in the Mississippi Valley: Landscape and Cultural Traditions (Cape Girardeau, Mo.: Center for Regional History and Cultural Heritage, Southeast Missouri State University, 1988), 9-60; Jay D. Edwards, Louisiana's Remarkable French Vernacular Architecture, 1700-1900 (Baton Rouge: Department of Geography & Anthropology, Louisiana State University, 1988); Jay D. Edwards, "Creole," in Paul Oliver, ed., Vernacular Architecture of the World, vol. 3 (Cambridge, U.K.; New York: Cambridge University Press, 1997), 1904-1906.

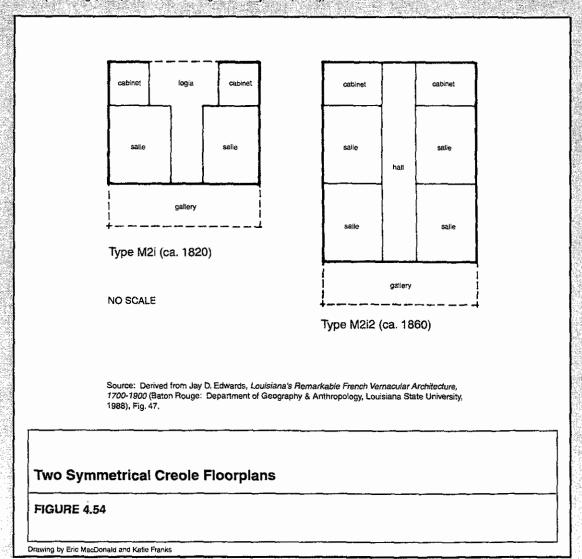




Figure 4.55. Alvar and Mary Bournique residence, lateral (southern) elevation, 1996. The overall form and vertical log cladding of the Bournique residence may have been inspired by Gulf Coast vernacular architecture.

twentieth-century Gulf Coast summer cottages, which were based on the four-square room arrangement. The fact that the Bournique's North Manitou residence also was intended primarily as a summer home, makes the possible link to Gulf Coast resort architecture even more intriguing. However, it is not known whether this affinity to Gulf Coast Creole vernacular architecture is mere chance, or whether it was intended by the building's owners or builder. Although of French descent, the Bournique family came to North Manitou Island from Chicago. Nicholas Feilen, the presumed builder of the house, was of German descent and also came to the island from Illinois.

The Bournique ice house is, perhaps, the most architecturally striking outbuilding on North Manitou Island (figure 4.56). It is a two-story, gable-roofed structure. The first floor has vertical log walls, similar to those of the Bournique house. The upper story is delineated from the lower portion of the building by flared eaves. The structure is clad with square wood shingles, and decorative wooden shingles in the gables. The two-story design of the building is unusual. Ice was placed in the upper level, and the lower level was used as cool storage for milk and other perishables. 68

Other standing outbuildings include a three-hole privy with vertical log walls and a gable roof, and a two-hole privy with clapboard siding and a gable roof (figure 4.57). The Bournique automobile garage is a story-and-a-half, gable-roofed structure with a cast

⁶⁸ Rusco, North Maniton Island, 59.



Figure 4.56. Alvar and Mary Bournique ice house, 1996. The Bournique ice house is one of the most visually intriguing structures on North Manitou Island. Its form, decoration, and exterior cladding materials complement the architecture of the residence.

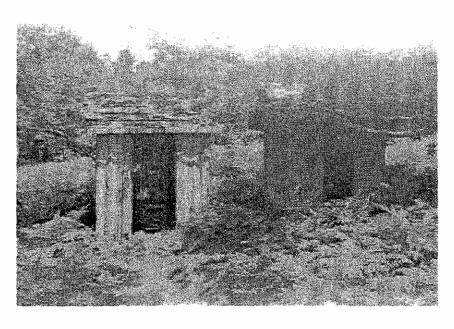


Figure 4.57. Alvar and Mary Bournique privies, 1996. Privies of two different designs line the walkway that leads downhill from the terrace behind the Bournique residence. One of the privies, clad with vertical logs, evidently was designed to match the architecture of the residence and ice house.



Figure 4.58. Alvar and Mary Bournique automobile garage, 1996. The Bourniques probably found their automobile to be a convenient and efficient mode of transportation from their remote summer home at the southeastern tip of the island. However, the difficulty of maneuvering early-model automobiles over the property's loose, sandy soils is suggested by the remnant corduroy driveway that extends outward from the western garage entrance. Other segments of corduroy surface may remain elsewhere on the Bournique farm, buried beneath drifts of sand.

concrete floor and clapboard siding (figure 4.58). It has an upper storage loft, and sliding doors on both gable ends.

Buildings and Structures, Farm Cluster

Of the buildings associated with the Bourniques' agricultural activities on North Manitou, only a corncrib remains standing. It is a small gable-roofed structure with wooden slat walls that taper upward.

All of the Bournique buildings are deteriorating steadily. The house, ice house, and garage are severely dilapidated. The wood shingle roof is in ruinous condition, and the interior of the house is rapidly decaying.

Contributing Landscape Features, Residence Cluster

Horse corral Spirea shrubs
Concrete walkways Lilac shrubs
Boardwalk Boulders

Log driveway Cistern structure

Maple trees Fence posts & wire fence
Wash house / laundry (ruin) Well (concrete side walls and

wooden cover)

Contributing Landscape Features, Farm Cluster

Ruin #1 Cast concrete water troughs

Ruin #2 Fence posts and wire fence

Pit Apple trees

Pile of wood Cottonwood windbreak

Small Barn (ruin) Large Barn (ruin)

Structure Number: Structure Number:

Dimensions: 16'-0" x 16'-7" Dimensions: 33'-4" x 37'-7"

Foundation: log sill Foundation: cast concrete

Walls: log, dovetail notching Walls: hewn log (none stand-

ing) and vertical posts (planks

nailed together)

Contributing Structures, Residence Cluster

House

Structure Number: 55102883 Dimensions: 36'-7" x 47'-7"

Foundation: wood post on sill

Walls: vertical log

Roof: gable, three gabled dormers; wood shingles

Privy #1

Structure Number: 55102887

Dimensions: 6'-4" x 5'-4"

Foundation: wood post on sill

Walls: wood lap siding

Roof: gable; wood shingle

Garage

Structure Number: 55102884 Dimensions: 16'-5" x 22'-4"

Foundation: wood

Walls: wood lap siding; vertical boards with saw-tooth ends in

gables

Roof: wood shingles

Privy #2

Structure Number: 55102888

Dimensions: 6'-0" x 6'-0"

Foundation: wood post on sill

Walls: vertical log

Roof: gable; wood shingle

Ice House / Storage Shed

Structure Number: 55102885

Dimensions: 14'-0" x 14'-0"

Foundation: wood post on sill

Walls: vertical log, wood

shingle

Roof: gable, wood shingle

Contributing Structures, Farm Cluster

Corn Crib

Structure Number: 53122893

Dimensions: 4'-4" x 6'-1" Foundation: wood posts

Walls: wooden slats Roof: wood shingle



SITES WITH STRUCTURAL RUINS

Mads and Gertrude Nerland / John and Ildri Anderson Farm

SE 1/4, NW 1/4,, Section 22, T-31N R-14W

History and Agricultural Data

Mads Nerland, a carpenter from Kristiansand, Norway, immigrated to the United States with his daughter Mary in 1888. His wife, Gertrude, and daughters Ildri and Anna followed in 1889, settling into a house that Mads had built on North Manitou Island that same year. During the following year, Ildri Nerland (b. 1874) married North Manitou resident John O[laf] Anderson. Tragically, only a few years later, Mads Nerland drowned while fishing in Lake Michigan. Gertrude Nerland later married a man named Hansen and moved to Suttons Bay. She died in 1916. John and Ildri Anderson remained on the island, residing in the house built by Ildri's father in 1889.⁶⁹

John Olaf Anderson was born in Norway during February 1860.⁷⁰ He probably immigrated to the United States around 1882.⁷¹ On 6 May 1890, he submitted his application for a 160-acre homestead claim located in the W½ NW¼ and W½ SW¼ of Section 22, T31N, R14W. According to the homestead records, Anderson and his family settled on the property that same year. By the time the proof was recorded in 1896, Anderson had cultivated two to ten acres of land for four years. He had built a frame house and barn on the property, together valued at \$200, where he, his wife, and their two children had resided continuously since May 1890. Witnesses bearing testimony on Anderson's behalf were North Manitou residents Albert Firestone (age 36) and Andrew Paetschow (age 37).⁷²

⁶⁹ Alan Green to Kim Mann, n.d., Sleeping Bear Dunes National Lakeshore, Empire, Mich.; Donna Elizabeth Kelenske Heater, "Recollections," *The Small Towner*, Spring 1984.
⁷⁰ U.S. Census Office, "Twelfth [1900] Census of the United States—Population."

⁷¹ Sources disagree regarding the date of John Anderson's immigration to the United States. The manuscript schedules for the 1900 federal census of population and Homestead Application No. 9377 indicate that Anderson came to the United States in 1882. The manuscript schedules for the 1920 federal census of population show that Anderson immigrated in 1879; Fritz ("History Data Report," 85) states that Anderson immigrated in 1878.

⁷² Application No. 9377; Final Certificate No. 6940, National Archives and Records Administration, Washington, D.C. The site of John O. and Ildri Anderson's house, barn and fields is located south of the log house built by Mads Nerland. If the testimony of John Anderson is accurate, the family may have moved to the Nerland house after 1896.

Ildri and John Anderson were the parents of twelve children: Albert (b. 1891), Eda (b. 1893), Martin (b. 1896), George (b. 1898), Eleanor (b. 1901), Arthur, Hans, John, Gertrude, Gladys, Margaret, and Mable. According to Gladys (Anderson) Dustin, the family farmed at their homestead until 1909, when John Anderson moved the family to Crescent. There, Anderson was employed by the A. J. White and Son sawmill and continued to work at Crescent until the Smith and Hull lumbering operation ceased. Rusco states that the Anderson family also was engaged in farming at Crescent, taking up residency at the Peter Swanson farm.

After lumber milling at Crescent ceased in 1915, the Anderson family returned to the home site built by Mads and Gertrude Nerland. At the time of the 1920 federal population census, John Anderson gave his occupation as a salaried farm laborer. He may have worked for the Manitou Island Syndicate, although it is also possible that he was employed as caretaker of the Bournique farm in 1920, since the Andersons performed this function for the Bourniques for many years during the 1920s and 1930s. 76 John and Ildri Anderson's sons Martin and George were lifesavers for the U.S. Coast Guard. Their daughter, Eleanor, was a "servant for a private family," and son Arthur was a farm laborer "working out." 77 John Anderson was a full-time employee of the Manitou Island Association during 1925-27. Albert and Henry Anderson also were full-time MIA employees during this time, and the association's account records indicate that payments occasionally were made to Ildri Anderson and "Mrs. Henry Anderson" for "boarding men" during the summer and early fall harvest seasons. Although they relied on outside employment for most of their income, John and Ildri Anderson continued some subsistence agricultural activities at their home. The Andersons maintained a farm garden during the 1920s, and records from the Manitou Island Association indicate that John Anderson sold a cow to the Manitou Island Association in 1928, suggesting that he also was farming on his own account during this time. 78 John Anderson died in Leland in 1955; the family sold its island property to the Angell Foundation in 1963.

Location and Landscape Setting

The Anderson farmstead is located in the southeastern section of the island. The house built in 1889 by Mads Nerland is located approximately three and a half miles south of the village, and one-half-mile west of the road that leads past the cemetery from the eastern shore road. The house is situated south of the island cemetery and west of the Bournique farmstead, in close proximity to the Bournique barn site (figure 4.41). Visually, the Nerland-Anderson house appears to "belong" to the Bournique farm complex. Several large sugar maple trees surround the Nerland-Anderson house and line the former roadway that connects the site to the Bournique buildings to the east (figure 4.59). The site is bounded on the west by a wall of dense, sugar

⁷³ Alan Green to Kim Mann; U.S. Census Office, "Twelfth [1900] Census of the United States—Population." The Andersons are not included in the 1910 federal census of North Manitou Island. The 1920 federal population census gives the ages of Arthur, Hans, Gertrude, Gladys, Margaret and Mable as 16, 11, 10, 8, 5, and 3, respectively. North Manitou cemetery records indicate that John Anderson died prematurely in 1907. He is buried in the island cemetery.

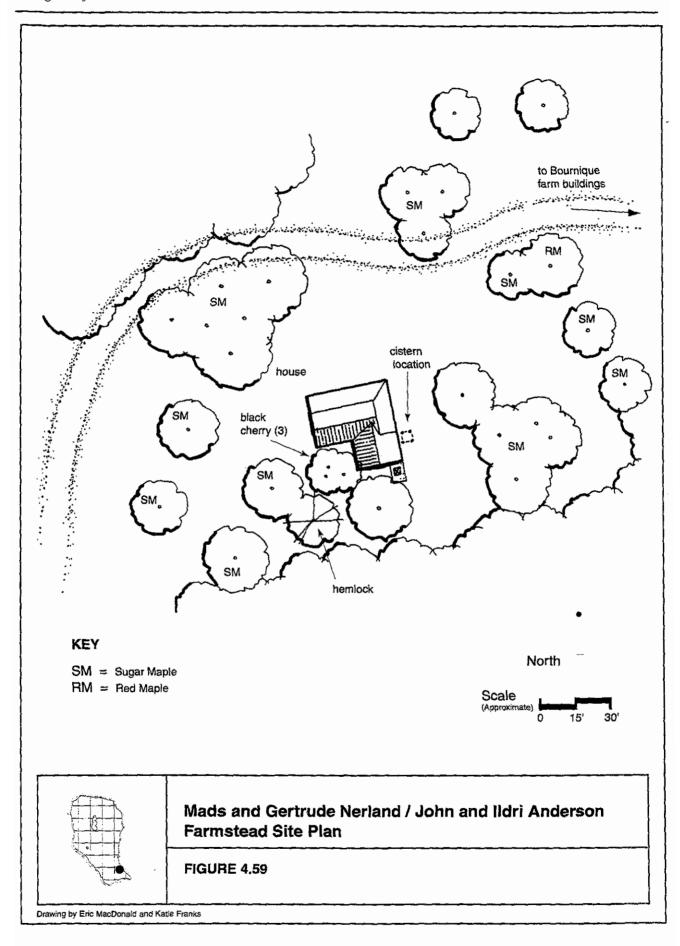
⁷⁴ Fritz, "History Data Report," 85; Rusco, North Manitou Island, 103.

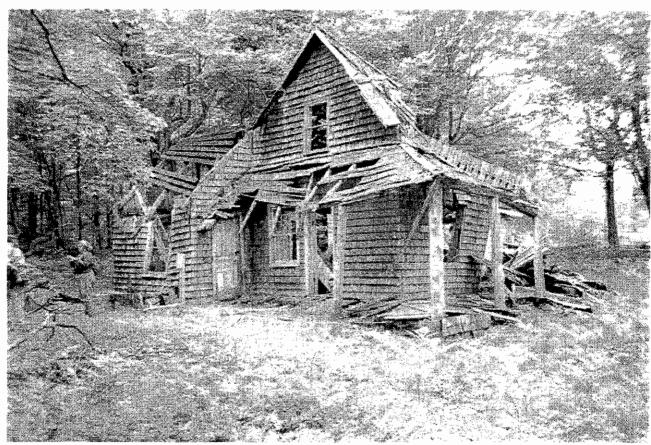
⁷⁵ Rusco, North Manitou Island, 74.

⁷⁶ Fritz states that Anderson worked "in behalf of the Syndicate under Mr. Newhall's direction." His source was Gladys (Anderson) Dustin. See Fritz, "History Data Report," 85.

⁷⁷ U. S. Department of Commerce, Bureau of Census, "Fourteenth [1920] Census of the United States—Population," microfilm copy of manuscript schedules, State Historical Society of Wisconsin, Madison.

 ⁷⁸ Fritz, "History Data Report," 28;
 Manitou Island Association Accounts
 Journal. Fritz ("History Data Report,"
 78) states that John Anderson was
 employed at the MIA sawmill during the late 1920s.





maple-beech forest. To the south and east are clearings associated with the Bournique horse ranch. The area has an open, grove-like character; colonization by new, woody species appears to be minimal. A large hemlock (*Tsuga canadensis*) tree is located northwest of the house. Other cultural landscape elements at the Nerland-Anderson house site include a well and a wooden platform for a cistern, both of which are situated along the southern elevation of the building.

The site of John Anderson's 1890 homestead house is located approximately one-half-mile south of the Nerland residence, not far from the former lighthouse site on the southeastern tip of the island. This house apparently disappeared from the North Manitou landscape quite rapidly. Anderson's grandson related that little remained of the house when his mother and grandmother visited the site during an outing in the mid-1920s. According to Rusco, the site was marked only by "surface remains of a barn or stable and a hillside fruit cellar. A group of apple trees mark the center of the cleating and there is an old trail leading to the south end lighthouse point." 80

Buildings and Structures

Of the buildings associated with John O. and Ildri Anderson's homestead on North Manitou Island, only the house built in 1889 by Mads Nerland remains standing. This structure is currently in an advanced state of decay (figure 4.60). The house was structurally intact, albeit deteriorated, when Shunichi Hagiwara surveyed the property in 1979.⁸¹ However, by 1996 much of the front (eastern) elevation had

Figure 4.60. Mads and Gertrude
Nerland / John and Ildri Anderson
house, 1996. The original one-room, or
single pen, unit of this log structure may
have been built by North Manitou
pioneer Mads nerland, making this
house one of the oldest architectural
resources on the island. Unfortunately,
the house is in an advanced state of
decay.

⁷⁹ Alan Green to Kim Mann.

⁸⁰ Rusco, North Manitou Island, 82.

⁸¹ Shunichi Hagiwara, "Building-Structure Inventory."

collapsed inward, and the second floor of the dwelling had fallen onto the first, which itself was caving into the cellar below. A lean-to woodshed addition on the rear of the house had completely collapsed.⁸²

The Nerland-Anderson house was a one-and-a-half-story, cross-gable dwelling. A wrap-around porch extended across the entire eastern facade and much of the southern facade. The house was constructed of hewn, squared logs and clad with wood shingles. Internal evidence suggests that the structure was built in two stages: the eastern rectangular section was built first, and another rectangular unit was added to the rear sometime later (figure 4.61). A deteriorated staircase along the southern wall suggests that the older, eastern section had a loft above. The rear addition, which was used as a kitchen, has a wood frame and wood shingle cladding. An old iron cook-stove and a sink remain inside the kitchen. A box window used for cool storage is positioned above the sink; it opens into the remains of the lean-to woodshed.

Contributing Landscape Features

well

hemlock tree

roadway

lawn

sugar maple trees

cistern stand

Contributing Structures

House (ruin):

Structure Number: 553122890

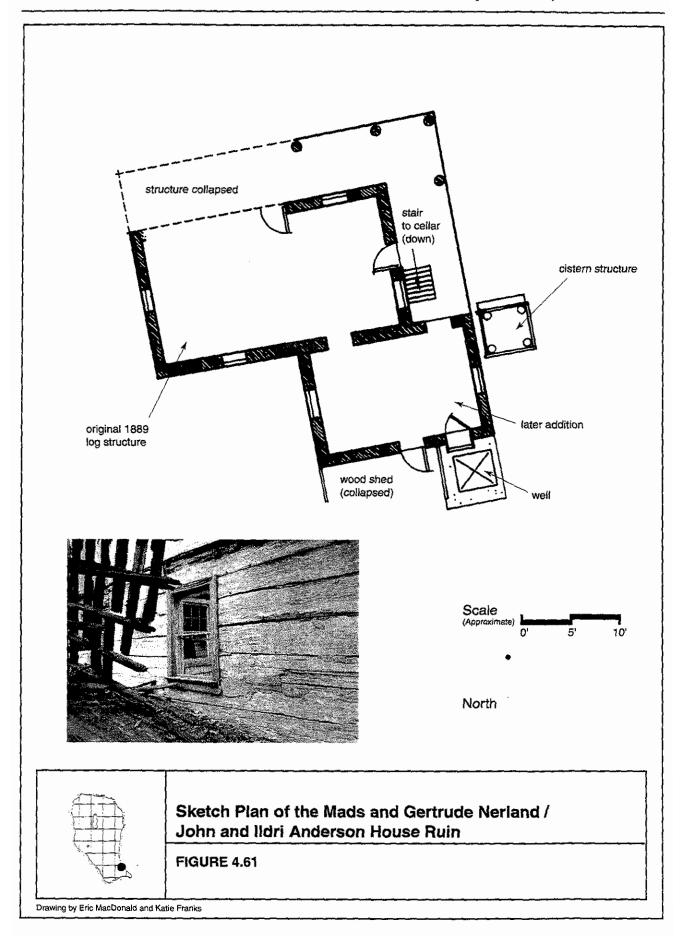
Dimensions: approx. 32'-8" x 27'-7"

Foundation: stone

Walls: log; wood frame; wood shingle cladding

Roof: wood shingle

⁸² Heater, "Recollections." A photograph published with this article shows this lean-to addition and the rest of the structure to be intact.



83 Sources provide conflicting data

Adam and Mary Maleski Farm

NE 1/4, NW 1/4, & NW 1/4, NE 1/4, Section 28, T-32N R-15W

History and Agricultural Data

The Maleski family's residency on North Manitou Island spanned three generations and nearly seventy years. Adam Maleski (b. ca. 1850) emigrated from Ocwiecim in Polish Prussia around 1868. He settled first in Milwaukee, Wisconsin, then traveled with his brother to North Manitou Island, where he found employment as a wood chopper. He married Mary Leterske in Milwaukee sometime during 1870-1873. Their first child, Mary, was born in Milwaukee in 1873. Shortly thereafter, the Maleskis moved to North Manitou Island, arriving, perhaps, in 1875 or 1878. The 1880 federal census of North Manitou Island lists "Adam Malshiska," a fisherman, and his wife Mary, both emigrants from Prussia. They had five children in their household: Mary, Anastasia, Elizabeth, Josephine, and Martha. Four more children were born to Adam and Mary after 1880, but two of them died in infancy. 85

Sometime during the late 1880s Adam acquired land in the northern half of Section 28, T32N, R14W where the family engaged in subsistence agriculture. The Maleskis later sold surplus farm commodities, especially pork and beef, to the families of men employed by the U. S. Life Saving Service. The Maleskis eventually built up a large herd of beef cattle. Instead of fencing their property, and confining the cattle to their land, the family used the openrange system. In addition to farming, the Maleskis relied on fishing for a significant portion of their livelihood throughout the late nineteenth and early twentieth centuries. The family maintained a substantial fishing camp and dock situated on the island's northeastern shore near a location called "Vessel Point" (figure 4.62).

At the time of the 1910 federal census, Adam Maleska [sic] and his wife, Mary, lived on the farm home with sons Paul, age 26, a mail carrier, and John, age 24, a fisherman. Adam Maleski was identified as one of only two farmers on North Manitou Island in 1910.87 Paul Maleski eventually took over management of the Maleski farm, which had evolved into a large-scale beef operation by the end of the nineteenth century. The Maleskis' herd consisted of up to two hundred head of beef cattle, which roamed the island. The cattle were branded to distinguish them from the free-ranging cattle of other island farmers. However, the Maleskis' practice of allowing their cattle herd to roam freely on the island conflicted with the aspirations of the Newhall family, who acquired large tracts of land on North Manitou in the 1890s. John Newhall, who managed the family's island farming operation, owned two stallions, which he gave free reign over his extensive land holdings. Eventually, the Maleskis were forced to discontinue their beef cattle operation. Like most of the island farmers, they managed to keep

regarding the birth, immigration, and marriage dates of Adam and Mary Maleski. On page eight of his "History Data Report," Fritz notes that Adam and his brother Frank traveled from Wisconsin to the eastern side of Lake Michigan in 1874. On page 21, Rusco (North Manitou Island) states that the Maleskis moved to North Manitou ca. 1875. According to the manuscript schedules of the 1900 federal population census, Adam was born in 1848, and Mary was born in 1849. Both immigrated in 1878, an impossibility since their daughter Mary, who had been born in Wisconsin, was age seven in 1880. Perhaps the Maleskis moved to North Manitou Island in 1878. However, the manuscript schedules of the 1880 federal population census indicate that Maleski's second-oldest daughter, Anastasia (age 5), was born in Michigan. This suggests that the Maleskis may have been on North Manitou by sometime during 1875. The manuscript schedules for the 1920 federal population census indicate that Adam had immigrated to the United States in 1868, Mary in 1872, and that both had been naturalized in 1910. 84 U. S. Census Office, "Tenth [1880] Census of the United States-Population," microfilm copy of manuscript schedules, Library of Michigan, Lansing. 85 Fritz, "History Data Report," 8. 86 Fritz, "History Data Report," 70. 87 U.S. Department of Commerce, Bureau of Census, "Thirteenth [1910] Census of the United States-Population." The other farmer was John L.

ST U.S. Department of Commerce,
Bureau of Census, "Thirteenth [1910]
Census of the United States—Population." The other farmer was John L.
Johnson, who lived in the southwestern part of the island. Paul Maleski was one of two mail carriers on North
Manitou Island in 1910; the other was
Johnnie Paetschow.



only as many cattle as they could maintain on the acreage that they owned.88

After they were forced to abandon free-range cattle ranching, the Maleskis concentrated on truck farming, catering to the summer resort population and the families of the island U. S. Life Saving Service. In their one-acre garden plot the Maleskis grew carrots, cucumbers, sweet corn, onions, beans, rutabagas, peas, beets, potatoes, and parsnips.⁸⁹ To protect their crops from the wild hogs that roamed the island, the Maleski family was forced to enclose their property with a cedar rail fence. The hogs had been released on the island during the 1910s by Peter Stormer, who intended to use them to feed his logging crews. The wild hogs eventually were eliminated, but the white tailed deer released by the Manitou Island Association in 1926 quickly became an even bigger problem for the Maleskis. They were forced to construct a tall wire fence around the garden plot in order to exclude the voracious deer.⁹⁰

In the 1920 census, Paul Maleski is listed as a farm laborer working on his own account. He lived with his wife Josephine, age 23, daughter Helen (b. 1915), son Chester (b. 1918), father Adam, and mother Mary. Three more children—Paul Jr. (b. 1921), Edward (b. 1922), and Patricia (b.1931)—were born to Paul and Josephine Maleski after 1920. Paul Maleski, who delivered mail between Crescent and the eastern side of the island during the lumber boom

Figure 4.62. Adam Maleski fishing camp, ca. 1910. Situated on Lake Michigan at the base of a steep bluff, the Maleski family continued to use these fish shanties and dock into the 1920s.

⁸⁸ Paul Maleski, Jr., interview with Betty L. Mann, 6 February 1996, audio tape recording on file at Leelanau Historical Museum, Leland. Michigan.

Furst, My Point of View (n.p., 1992),Rusco, North Maniton Island, 71-72.

⁹⁰ Paul Maleski, Jr., interview by the authors, 26 July 1997, notes filed at Sleeping Bear Dunes National Lakeshore, Empire, Mich.

⁹¹ U. S. Department of Commerce, Bureau of Census, "Fourteenth [1920] Census of the United States—Population."

⁹² Paul Maleski, Jr., interview by Eric MacDonald, 28 July 1997, notes filed at Sleeping Bear Dunes National Lakeshore, Empire, Mich.; Paul Maleski, Jr., audio tape recording, 29 August 1984, Sleeping Bear Dunes National Lakeshore, Empire, Mich.

of the early 1910s, inherited the family farm after Adam Maleski's death in 1921. 93 The Maleski farm encompassed approximately forty acres at this time.

The farmstead included a diverse array of structures, typical of a small, diversified farming enterprise. Adam and Mary Maleski occupied a one-and-a-half-story "pioneer" house that Adam had built when he settled on the property. It was constructed of pine and hemlock lumber that had washed ashore from shipwrecks, and consisted of three rooms and an upper loft that was accessed by an external stair. The pioneer house faced east, and had flower gardens in front near the entrance (figure 4.63). A vegetable garden was located a few yards southeast of the pioneer house. Paul Maleski built a second house for his family around 1913 (Figure 4.64). This building also was constructed primarily of found materials, as well as from "reject" lumber from the mill at Crescent.

There were three large barns on the farmstead. The largest barn accommodated more than thirty cattle; another barn housed four horses, thirteen head of cattle, and three calves; a small barn located behind the Paul Maleski house accommodated horses. Like the Maleski houses, most of the materials for the barns consisted of drift lumber that was hauled up the bluff to the farm. Other outbuildings included two corn cribs and a garage, the latter built to house a 1921 Ford Model-T that the family acquired in 1929. The Maleski garage was constructed on the site of the early vegetable garden. 94

Giles Merritt recalled that during the mid-1920s the Maleski family farmed primarily for their own consumption (figure 4.65). Merritt estimated that Paul Maleski and his brother John, who owned a small homestead near the northeastern shore of the island, cultivated a total of about 20 acres of land. Paul Maleski, Jr., recounted that his father utilized a three-year rotation in his fields.

Figure 4.63. Mary Maleski in her flower garden in front of the Maleski "pioneer" house, ca. 1920s.

⁹³ Fritz, "History Data Report," 70. According to Rusco (North Manitou Island, 70-71), Adam died in 1922.

⁹⁴ Paul Maleski, Jr., interview with the authors, 26 July 1997; Paul Maleski, Jr., audio tape recording, 29 August 1984.

⁹⁵ Fritz, "History Data Report," 24; 28.

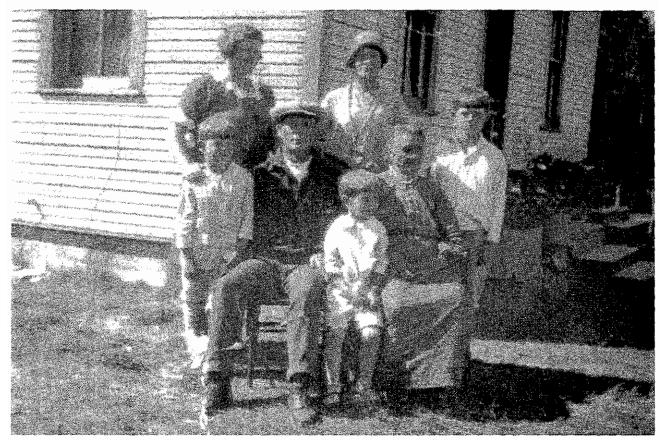


Figure 4.64. Paul and Josephine Maleski family, ca. 1920s, posed in front of the frame house built by Paul Maleski during the previous decade. Standing, left to right: Paul, Jr., Josephine, an unidentified relative from Milwaukee, Edward. Seated, left to right: Paul, Sr., Chester, Mary.

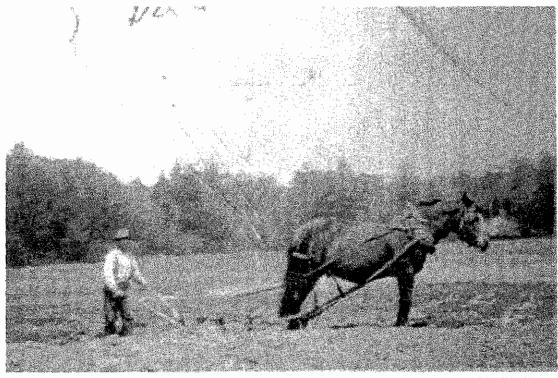


Figure 4.65. Paul Maleski and draft horse, "Prince," plowing a field on the Maleski farm, ca. 1920s.

One year consisted of a cover crop that was plowed under the following year. Potatoes were planted the second year, followed by corn during the third year. Part of the cleared land was used for pasture for the family's small dairy herd. According to the junior Maleski, his father kept approximately five dairy cows, one of which was reserved strictly for family use. 96

Paul Maleski's relationship with the island's large property owner, the Manitou Island Syndicate, was somewhat adversarial. Like the Newhall family, the syndicate opposed Paul Maleski's efforts to keep large herds of beef cattle on the island, partially because the syndicate intended to do the same on its property. The MIA deer herd also posed a significant nuisance to the Maleskis' efforts to earn income through market gardening. Nonetheless, the association also represented a significant source of monetary income in the cash-poor local island economy, and the Maleskis occasionally engaged in business transactions with the association. For example, MIA records indicate that Paul Maleski sold one cow and one steer to the association during 1924-1929, and that the Maleski children were employed by the association during the cherry harvest seasons. 97 Paul, Jr., worked for the MIA for two summers. His duties included milking the association's nine dairy cows, caring for calves, cleaning the barn, and hoeing corn. He also worked at the MIA sawmill at North Manitou Village.98

Mary Maleski continued to live in the "pioneer" home until her death in 1930. Paul Maleski, Jr., left North Manitou Island in 1938. Two years later, Paul, Sr., and Josephine Maleski retired from their island farm, and moved to the mainland, leaving behind home furnishings, farm equipment, and their Model-T Ford. Paul Maleski, Jr., returned to the island periodically during 1946 and 1947, but after experiencing life on the mainland he decided "there was no future in rutabaggies." After working for the Traverse City Police Department for several years, he established a mink farm on the mainland, which he later developed into a successful hog farm. The Angell Foundation paid Paul and Josephine Maleski \$4,500 for their island property in 1955. The foundation acquired other lands nearby at about the same time. 99 Paul Maleski, Sr., died in 1976, at age 93, and is buried on the mainland.

Location and Landscape Setting

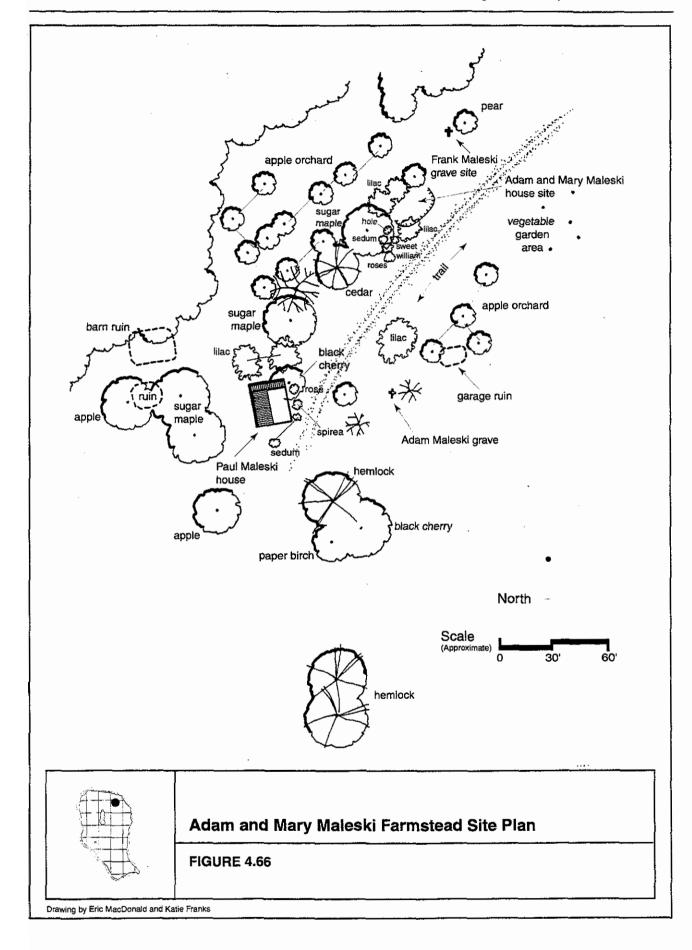
The Adam and Mary Maleski farm is located in the northeastern portion of North Manitou Island, approximately one-half mile west of the Lake Michigan shore, and about three miles northwest of the village. It is reached via one of two roads that extend northward from the village, one of which follows the crest of the bluff along the eastern shore; the other runs parallel to it approximately one-half-mile farther inland. The farmstead is located in the southwest-ern corner of a clearing of approximately forty acres (figure 4.66).

⁹⁶ Paul Maleski, Jr., interview with the authors, 26 July 1997.

⁹⁷ Manitou Island Association Accounts Journal.

⁹⁸ Paul Maleski, Jr., interview with the authors, 26 July 1997.

⁹⁹ Memorandum, [W] Craig Keith to [Board of Trustees, William R. Angell Foundation], 31 December 1976; Rusco, North Manitou Island, 21; Fritz, "History Data Report," 21, 35.



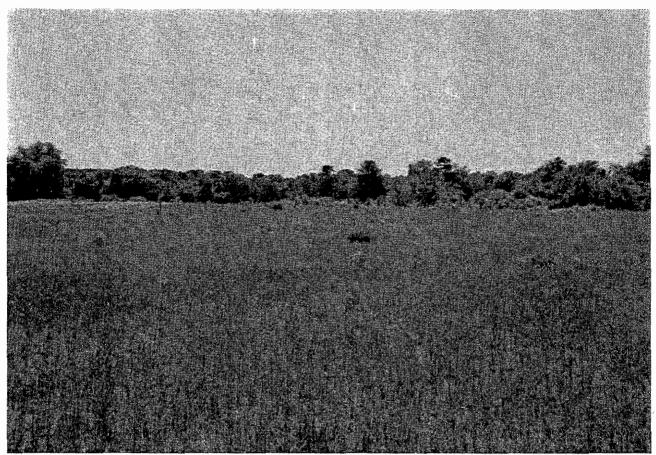


Figure 4.67. Adam and Mary Maleski farm clearing, 1996. Although not large in extent, the clearing bears the imprint of approximately seventy years of subsistence agriculture. The size and shape of the clearing appear to have changed little since it was recorded by aerial photograph in 1938.

Surrounded by a forest of sugar maple, beech, and hemlock, the clearing was once used for agricultural crops, livestock pasture, and orchard.

Although the Maleski farm was abandoned nearly sixty years ago, the edges of the clearing remain sharply defined, and the space remains relatively free of invasive woody vegetation (4.67). Only a few individuals of *Juniperis communis* have managed to colonize the opening. This high degree of spatial integrity is probably due to the herbivory of the island's substantial deer herd, which the Maleskis valiantly battled during the 1930s and early 1940s. A small cluster of apple trees is located along the eastern edge of the clearing, and a rock pile marks the northeastern corner where the trail enters the space. Farther east, near the center of the clearing, is the site of the Maleski's vegetable garden. The former extent of the garden area is roughly demarcated by several tall wooden poles, which once served as fence posts to exclude the island deer.

Viewed from within the clearing, the farmstead structures are almost completely screened by a remnant apple orchard (figure 4.68). The orchard, which is situated east and northwest of the house, consists of numerous dead and living apple trees and a pear tree. At least two grave sites are located in the orchard, both of which recently were marked by the Manitou Island Memorial Society. The burial site of Adam Maleski is indicated by a concrete cross near a dead apple tree that is located several yards east of the

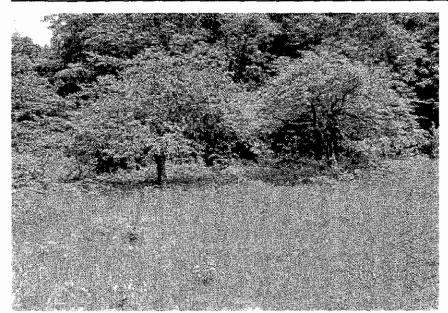


Figure 4.68. Apple trees, Adam and Mary Maleski farm, 1996. Aside from the vast commercial fruit plantation at the former Frederic Beuham homestead, the apple and pear trees at the maleski farm constitute the largest farmstead orchard on the island. From several vantage points the trees effectively screen views of the house ruin.

house. Farther northeast, beside a pear tree, the grave of Frank Maleski is similarly marked (figure 4.69). Near the center of the orchard, a sugar maple, a white cedar tree, and two cultivated rose shrubs are located beside a deep hole that may have been a well.

The farmstead site is marked by a pair of large hemlock trees located near the house. Also near the house are several sugar maple trees, which certainly must have been present when the Maleskis lived at the farm. Other relict ornamental vegetation in the vicinity of the house include a large clump of lilacs north of the structure, and a small clump of sedum south of the house. In front (east) of the house, near the entrance, there is a cultivated rose shrub that has slightly fragrant, double pink blooms in mid-summer.

Buildings and Structures

As of 1997, the Paul Maleski house was the only structure standing at the farmstead. However, it was in ruinous condition—the roof failing, and the entire structure caving inward (figure 4.70). The house is a one-and-a-half story, wood-frame dwelling with a side gable roof and wood lap siding. The terrain slopes downward from the house toward the west. Located downhill, several yards northwest of the house, is a barn ruin, now merely a mass of wooden debris that is completely engulfed in a thicket of raspberries (Rubus sp.) and other vegetation. The barn, surrounded only by dense, herbaceous vegetation, was collapsing when Shunichi Hagiwara inventoried the property in 1979. Only the house and the garage were standing when Fritz completed his inspection of the site in September 1985. The garage was badly deteriorated, the roof of the barn had collapsed, and the building was considered a ruin. 100 The garage, currently a heap of wooden debris, is located east of the house amidst the orchard. Another small pile of debris is located downslope a few yards west of the house.

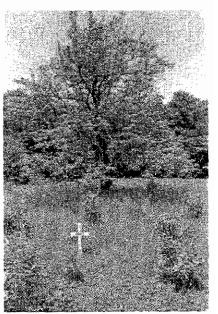


Figure 4.69. Frank Maleski grave site, Adam and Mary Maleski farm, 1996. The pear tree marks the grave of one of two Maleskis buried on the family's former North Manitou farm. The Manitou Island Memorial Society has commemorated each grave with a small concrete cross.

100 Fritz, "History Data Report," 72.



Figure 4.70. Paul Maleski house ruin, 1996. The Maleski house was built during the early- or mid-1910s for the growing family of Paul, Sr., and Josephine Maleski. An earlier "pioneer house," which Adam Maleski built during the late 1870s using drift lumber salvaged from Lake Michigan, formerly was located several yards to the northeast.

Contributing Landscape Features

barn ruin garage ruin shed ruin earthen depression fence posts

grave markers hemlock trees

sugar maple trees

apple trees (orchard remnant)

white cedar tree

pear tree lilacs

spirea shrubs rose shrubs

sedum

Contributing Structures

House (ruin)

Structure Number: 58100867 Dimensions: 21'-5" x 23'-0"

Foundation: None Walls: wood lap siding Roof: side gable, shingle

Lars Christian Alstrom Homestead / Peter Stormer Farm

E 1/2 SW 1/4 & W 1/2 SE 1/4 Section 21, T31N R14W

History and Agricultural Data

On 19 December 1884, Lars Christian Alstrom filed a homestead application for 160 acres of land in the E½ SW¼ and W½ SE¼ of Section 21, T31N, R14W, North Manitou Island. Alstrom, a Swedish immigrant, indicated on his application that he had previously worked on the island as a farm hand. His claim consisted of land that had been logged by Nicholas Pickard "years ago." After clearing some land, Alstrom constructed a house on 1 April 1885, with the assistance of seven men. He took up residence there four days later. The house was a log structure 14' x 21', furnished with a stove, chairs, bed, and a table. By 1887, Alstrom had acquired a plow, wagon, drag, hoe, and rakes.

Final testimony on Alstrom's homestead claim was given at Grayling, Michigan, on 15 November 1890. At that time Alstrom lived on the property with his wife, son, and daughter. He had six acres under cultivation, which had yielded a total of 200-300 bushels of potatoes, corn, rye, oats and turnips during each of six seasons. Alstrom also had a frame barn that measured 20' x 30'. He owned four cows, two calves, two horses, two pigs, and two sheep. Alstrom reported that he worked two or three days at a time for neighbors "in the spring and harvest time" but otherwise "staid [sic] to home." The property was patented by Alstrom on 2 November 1891, and approved on 9 September 1891. The witnesses were Andrew Anderson, 67 years old, a North Manitou resident at Section 20, T31N R14W, and Johan Oscar Peterson Anderson, a farmer and a fisherman. Alstrom's neighbors were August Anderson, and John Anderson, who resided in sections 21 and 22 respectively. 101

The 1900 federal census of Leland Township (which encompassed North Manitou Island) lists Christian Olestrom [sic], who was born in July 1851, and his wife Nartha [sic?], born in September 1854. Both were Swedish immigrants. They had been married for sixteen years, and had immigrated to the United States in 1884. They had three children, two of whom were living, although neither was residing in the household at the time. Alstrom claimed that he owned his farm free. 102 According to Rusco, the Alstroms sold their farm to Milton Armstrong in 1901. 103 Armstrong's ownership of the property ended sometime before 1909, and the farm subsequently became the home of Peter Stormer. 104

Peter Stormer's parents, Henry and Anna (Lewis) Stormer, along with their daughter Greta, emigrated from Prussia in 1857. The family settled first in Milwaukee, Wisconsin. They moved to North Manitou Island during the fall of 1859, where they "carried on agricultural pursuits for several years." 105 Peter Stormer was born

¹⁰¹ Homestead Application #8745, Final Application #6590, National Archives and Records Administration, Washington, D.C.

¹⁰² U.S. Census Office, "Twelfth [1900] Census of the United States—Population."

¹⁰³ Rusco, North Manitou Island, 52.

¹⁰⁴ Fritz, "History Data Report," 86-87.

¹⁰⁵ Elvin Sprague, The Grand Traverse Region, Historical and Descriptive (Chicago: H. R. Page & Co., 1884), 466-467.
According to Josephine Alford Hollister ("Summer Resort"), Henry and Anna Stormer's North Manitou farm was part of the series of clearings now associated with the "Carlson place."



Figure 4.71. Peter Stormer and sled loaded with logs cut on North Manitou Island, ca. 1910s.



Figure 4.72. Peter Stormer family on North Manitou Island during the mid-1910s.

on the island in 1860.¹⁰⁶ In 1864 the Stormers moved to the Michigan mainland, settling in Empire Township.

Around 1908, Peter Stormer secured a contract for logging on North Manitou Island (figure 4.71). This probably was with Benjamin Newhall. The timber that Stormer harvested was first sent to mills on the mainland. Around 1917 Stormer constructed a large dock at the southern end of the island, near the location of Nicholas Pickard's first wooding station and not far from the Bournique homestead. He constructed a sawmill to which logs were hauled from camps at the northern and southern ends of the island. 107

Sometime after 1913, Stormer moved his family to the Alstrom farm (figure 4.72). It is not clear whether Stormer actually purchased the property from Armstrong, as Fritz suggests, or whether Armstrong sold the property to Benjamin Newhall who in turn leased it to Stormer as part of their business arrangement. 108 Stormer used the farm to sustain his family, as well as the men and animals working in his two lumber camps on North Manitou (figure 4.73). Ethel Stormer recalled that the family raised "a great many cattle and had to keep about 40 to 45 horses for the lumber camps. Consequently they needed a great deal of grain and hay—some of which they raised on the island, but large quantities had to be hauled from the mainland, sometimes across the frozen lake during the winter." Glenn Furst recalled that the Stormer family's diet included potatoes, beef, fresh milk, and homemade cottage cheese. The Stormer farmstead had a horse barn, a cow barn, a place for pigs and chickens, a blacksmith shop, and a slaughter house. One of the bunkhouses was located "some distance away" from the farm. 110

At the time of the 1920 census, Peter Stormer, Sr., was living on a rented farm with his wife Helen, and their children Joseph (20), Henry (17), Lewis (16), John (15), Harold (9) and Benjamin (7). Peter's occupation was logging, and he was an em-

Census Office, "Eighth [1860] Census of the United States—Population," microfilm copy of manuscript schedules, Library of Michigan, Lansing; Hollister, "Summer Resort"; Fritz, "History Data Report," 86. The manuscript schedules of the 1860 federal population census suggest that Peter Stormer was born five years earlier.

107 Fritz, "History Data Report," 86-87; Rusco, North Maniton Island, 52; Hollister, "Summer Resort."

108 The 1920 federal census manuscript indicates that Stormer lived on a rented farm, suggesting that the property

Syndicate during his tenure there.

109 Fritz, "History Data Report," 86-87.

110 Furst, My Point of View, 60-61.

remained in the possession of the Newhalls or the Manitou Island

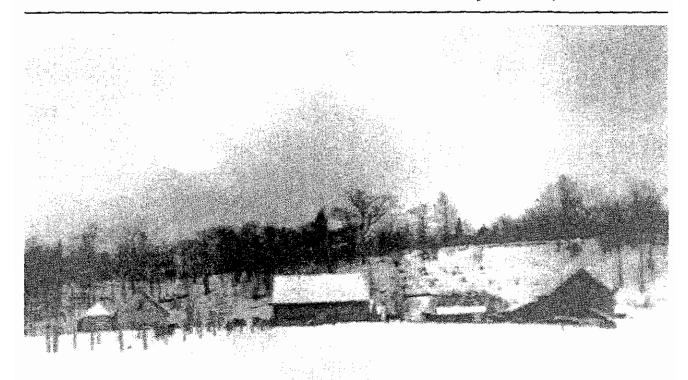


Figure 4.73. Peter Stormer farm, ca. mid-1910s. North Manitou's earliest farms were large-scale agricultural enterprises that primarily supported wood-cutting crews. During the mid-1800s these farms came and went on the island with the logging ventures that they served. The Peter Stormer farm was a twentieth-century version of such operations, supplying Stormer's various island logging camps with fresh meat, grain, and hay.

ployer. Joseph was a life saver for the U. S. Coast Guard, and Henry was a farm laborer who probably worked for his father. Peter Stormer, Jr., age 27, also was living on North Manitou Island in a separate household with his wife. He was a salaried laborer in a lumber mill—certainly the one owned by his father since no other mills were operating on North Manitou Island during this time.¹¹¹

The Stormer family left the island in 1923 after the harvestable timber supply was depleted. Peter Stormer, Jr., then dismantled the sawmill and sold some of the mill machinery to the Manitou Island Association. Harold Stormer returned to the island as a U.S. Coast Guard employee in 1927. The Alstrom homestead, however, has remained uninhabited since the departure of Peter Stormer. The property eventually was incorporated into the land holdings of William Angell and the Manitou Island Association. The MIA utilized the large clearing at the site for hay production to feed the island's deer herd. Jean Lundquist recalled that by the 1940s and 1950s the only buildings at the site were the house and a small barn.

Bureau of Census, "Fourteenth [1920] Census of the United States—Population." The fact that Peter Stormer, Sr. is listed as residing on a rented farm, implies that he may not have purchased the property from Armstrong as Fritz ("History Data Report," 86) suggests. Perhaps Stormer leased the farm from Armstrong or a different owner such as Benjamin Newhall, and merely took possession of the property sometime around 1913.

- 112 Furst, My Point of View, 77.
- 113 Fritz, "History Data Report," 25.
- 114 Fritz, "History Data Report," 24.
- North Manitou Island, n.d. (ca. 1925), MIA Collection, Sleeping Bear Dunes National Lakeshore, Empire, Mich. The map does not indicate the owner of the property.
- ¹¹⁶ Giles E. Merritt, untitled manuscript, 11 February 1986. Merritt was hired by the Manitou Island Syndicate in autumn 1925.

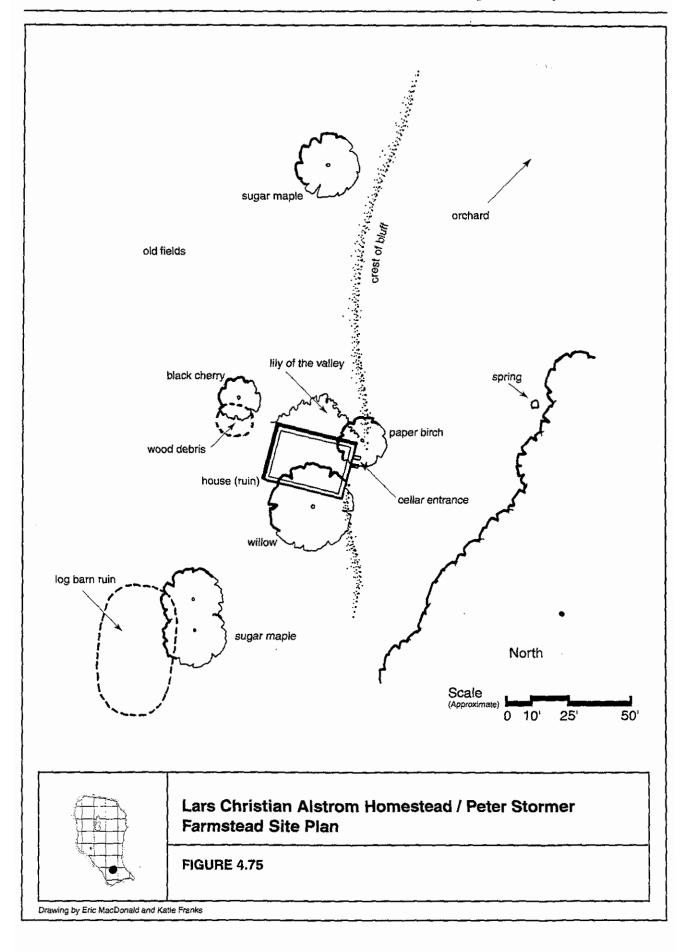
¹¹⁷ Lundquist, interview.



Figure 4.74. Peter Stormer farm clearing, viewed from the edge of the woods, 1996. The large clearing of the Peter Stormer farm contrasts sharply with the dense, shady maple-beech woodland that surrounds it. The low. open-community vegetation of the clearing emphasizes the site's rolling topography and dramatic landforms, including a vale that follows the southeastern edge of the clearing and parallels an esker located several yards into the woods. Relict agricultural clearings such as this add to the diversity of landscapes found on North Manitou Island. and increase the variety of aesthetic experiences available to visitors. The large clearing at this site also represents a type of farming enterprise that played an important role in the history of agriculture on North Manitou Island.

Location and Landscape Setting

The Alstrom homestead is located in the extreme southern end of the island, approximately four miles south of the village, and approximately one mile southwest of the Bournique farm. Like many of the former farms on North Manitou Island, the clearing at the Alstrom homestead retains remarkable spatial integrity. A former farmstead is located near the south-central portion of an oblong-shaped clearing that is approximately one-half-mile long by nearly a quarter-mile wide (figure 4.74). The clearing is situated atop a plateau that is bounded by a large esker that extends across the southern end of the island in a northeast/southwest alignment. The terrain is slightly undulating, but drops off sharply at the southeastern edge of the clearing, forming a valley near the base of the esker. Since it is unlikely that Lars Alstrom ever cultivated much more than the modest acreage indicated in his homestead application, this sizable clearing probably reflects the extensive agricultural venture operated by Peter Stormer to support his logging camps. The northern portion of the clearing extends beyond the boundary of the claim filed by Alstrom, further suggesting that its current size and shape more reflects Stormer's tenancy. The farmstead structures have an upland site, overlooking the valley and relict apple orchard below, and the densely-wooded esker (figure 4.75). A natural spring is located below the house, at the base of the esker.



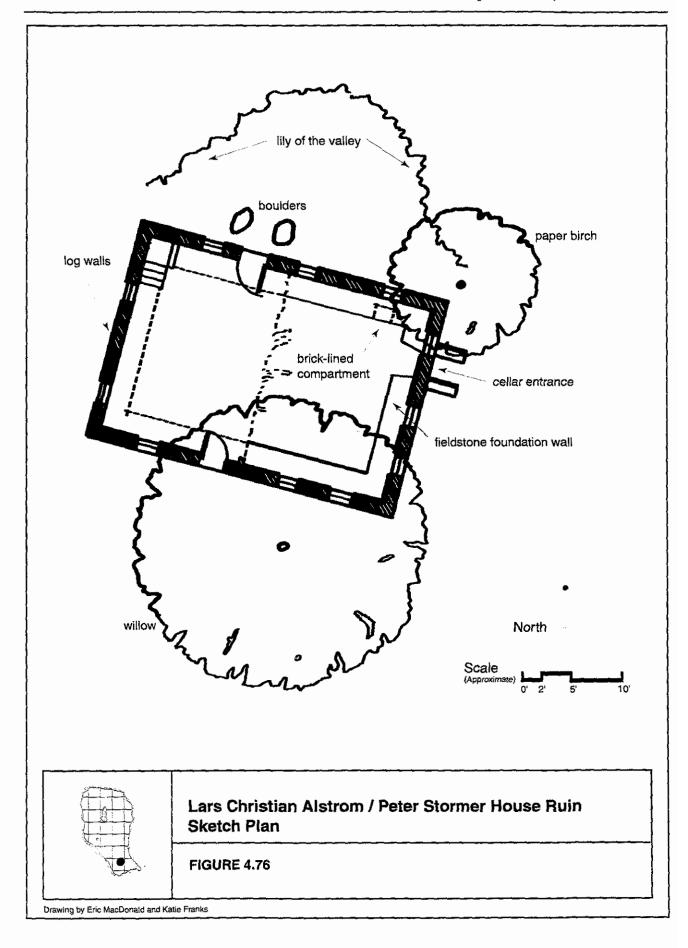
Significant cultural landscape features associated with the Alstrom homestead include a relict apple orchard northeast of, and below, the house site. In the clearing above the orchard, several yards east of the house, is a single, large sugar maple tree. The house ruin is shaded by a massive willow tree growing next to the south facade of the structure. The north entrance to the house is flanked by two large boulders and an expansive, monotypic patch of lily-of-the-valley. A portion of the spring located in the valley directly east of the house appears to have been formerly lined with logs. Located several yards south of the house, in a clump of trees and raspberries, are the remains of a log barn. Some of the intact logs are thirteen inches in diameter. It is now merely a pile of wooden debris; however, the footprint of the structure is still discernible. Amidst the barn ruins is an unidentified piece of farm machinery.¹¹⁸ The large size of the logs and the severely deteriorated condition of the structure suggest that this structure may predate the Stormer lumber camp era.

Buildings and Structures

A roofless log house and a collapsed barn are the sole remnants of farm structures at the farmstead (figures 4.76 and 4.77). The roof and floor of the house have collapsed inward, leaving only the four side walls of the structure standing. The shingle-clad log walls of the house rest on a dry-laid, fieldstone foundation that is three-anda-half feet thick. The cellar is built into the hillside, exposing the entire eastern wall of the foundation. There is an entrance to the cellar in the eastern foundation wall, and a curious brick-lined compartment in the northern foundation wall just below the sill level. Entrances to the main floor of the house face north and south. The walls of the house display sawed, squared logs clad with wood shingles. The logs are joined by an unusual and exquisitely detailed square notching system. A triangular section cut from the top and bottom horizontal surfaces of each notch eliminated the need for pegging and made the corners self-binding (figure 4.78). The design of this notching system, as well as the precision with which it was executed, produced an incredibly stable joint. The notching system is not a typical of Nordic log construction technique, suggesting that the present building is not the original homestead house built by Lars Christian Alstrom in 1885. That structure reportedly was smaller than the present house ruin, and it seems unlikely that large, circular-sawn timbers would have been locally available to Alstrom during the mid-1880s. 119 If any of the relict cultural features at the site are associated with Alstrom, the most likely candidate may be the adjacent log barn ruin. The present house structure may have been built by lumbermen associated with Peter Stormer's logging camps during the early 1900s. Regardless of its provenance, the fact that the log walls of this house remain intact, after more than seventy years of abandonment and neglect, is a testament to the skill of the builders.

¹¹⁸ This machine, manufactured by Heebner & Sons, bears the oxymoronic name "Little Giant."

119 According to the homestead documentation, Alstrom's house was considerably smaller than the present structure, which measures roughly 22' x 32'.



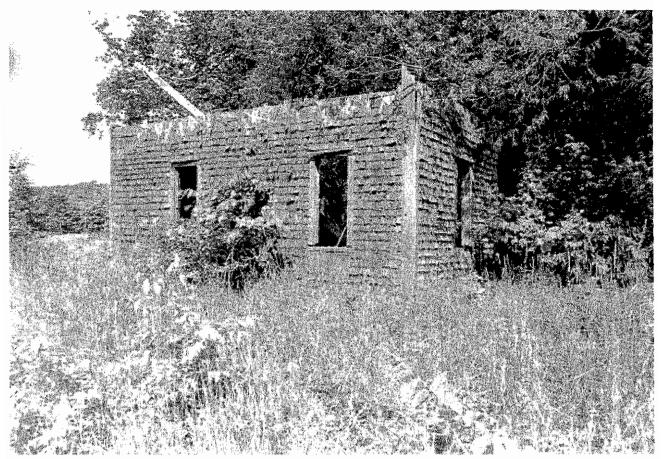
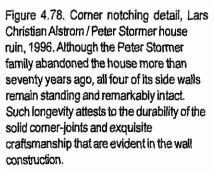
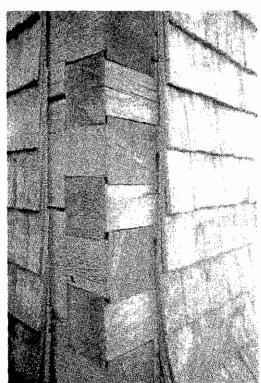


Figure 4.77. Lars Christian Alstrom / Peter Stormer house ruin, 1996. The ruin is perched along the brow of an upland plain, with one of the basement walls integrated into the slope. Ornamental vegetation includes an extensive patch of lily-of-the-valley and a towering willow tree.





Contributing Landscape Features

barn (ruin)

spring

willow tree

apple trees

lily-of-the-valley

sugar maple tree

boulders

Contributing Structures

House (ruin)

Privy¹²⁰

Structure Number: 53122895

Structure Number:

Dimensions: 32'-5" x 22'-3"

Dimensions: 4'-0" x 4'-8"

Foundation: stone

Walls: wood board-and-batten

Roof: gable

Walls: log with wood shingles

Roof: none

Nelson and Sophia Carlson Homestead / Carlson Place

SE1/4 Section 9, T31N R14W / NE1/4 Section 4, T31N R14W

History and Agricultural Data

Nelson Carlson (b. 1857?) and his wife Sophia (b. 1857) emigrated from Sweden in 1876. 121 By 1880, the Carlsons were living on North Manitou Island. The couple lived with their son William, age 2, and daughter Amanda Pauline, an infant. Nelson Carlson listed his occupation as fisherman. 122 According to the land tract records for North Manitou Island, Carlson homesteaded 160 acres of land in the SE½ of Section 9, T31N, R14W. Carlson's application was made on 14 March 1896, his proof was made on 9 July 1903, and the patent received on 20 March 1905. 123 No additional information is available regarding this homestead claim. The clearing currently associated with the "Carlson Place" is located in the eastern portion of Section 4, approximately one mile north of the Carlson's homestead claim (figure 4.80). There are no known buildings or cultural landscape features associated with the Carlsons at their homestead property in Section 9.

120 List of Classified Structures, field notes. The authors did not observe a privy at the site. Perhaps the field notes refer to a small ruin that currently exists north of the house.

¹²¹ U. S. Census Office, "Tenth [1880] Census of the United States—Population;" U.S. Department of Commerce, Bureau of Census, "Thirteenth [1910] Census of the United States—Population." The enumerator of the 1880 federal census spelled the surname "Charlson," indicated that Nelson had been born in 1854, and that his wife's name was Johanna.

¹²² U. S. Census Office, "Tenth [1880] Census of the United States—Population."

¹²⁵ U.S. Land Office, "Tract Books," vol. 45 (Leelanau County), State Archives of Michigan, Lansing. For a transcription, see Fritz, "Appendix A: First Purchasers of Land on North Manitou Island" in "History Data Report," 52-66.

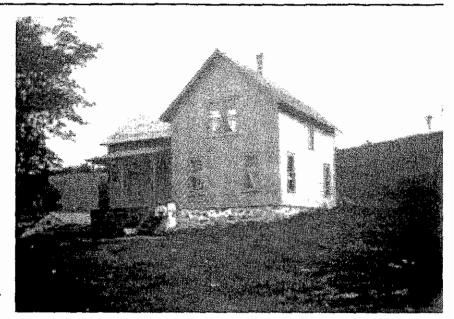


Figure 4.79. Nels and Sophia Carlson farm house on North Manitou Island, ca. 1900.

Rusco suggests that Nels Carlson engaged in a free-range cattle venture with Silas Boardman. However, this endeavor eventually proved to be unprofitable. The Carlsons primarily were subsistence farmers who raised pigs, sheep, cattle, horses, and crops to feed their family and livestock. Nels Carlson worked in lumber camps, fished, and farmed, while Mrs. Carlson sewed, carded and spun yarn, helped in the fields, and canned about a thousand jars of fruits and vegetables each year. The family employed three hired men in 1900.¹²⁴ Active members of the North Manitou community, the Carlsons built the island school in 1895. Nels Carlson was named director of the school, and also served as a volunteer in the U.S. Life Saving Service. ¹²⁵

The Carlson family included twelve children, ten of whom were living on the island at the time of the 1910 census: William (b. 1878), Oscar (b. 1883), Hilda (b. 1885), Jered (b. 1887), Alfred (b. 1889), Millie (b. 1891), Adam (b. 1893), Esther (b. 1896), Irving (b. 1898), and a baby born in May 1900. William was employed as a farm laborer. The Carlsons held free title to their farm. Led Carlson, the ninth child, was born on North Manitou Island in 1894.

In 1903, the Carlsons sold their farm to Benjamin Newhall, and moved to Leland. During March of that year, three teams of horses pulled sleds loaded with the family's possessions across the frozen Manitou Passage. The Carlsons then settled on a 217-acre farm next to the cemetery in Leland. On their mainland farm, the Carlsons raised potatoes and general crops, which they transported to market in Lake Leelanau or Suttons Bay. Later, their son, Ed, became a successful commercial fisherman. 127 A handwritten note on a historic photograph in the Betty Kramer Collection of the Leelanau Historical Museum indicates that the Carlson farmstead was occupied by one of Peter Stormer's lumber camps during 1908. Fritz states that that when Stormer moved his family to the island in 1913, they initially settled at the Carlson place. 128

124 Marie Averill, "Fisherman Finds Contentment in Retirement from the Lake," *Leelanau Enterprise-Tribune* [?], 26 November 1970.

125 Rusco, North Manitou Island, 54.

Averill, "Fisherman Finds Contentment;" Rusco, North Manitou Island, 55.
 Fritz, "History Data Report," 86.

¹²⁶ U.S. Department of Commerce, Bureau of Census, "Thirteenth [1910] Census of the United States—Population."



Figure 4.80. Nels and Sophia Carlson farm clearing, 1996. The clearing appears to retain a remarkable degree of spatial integrity, which no doubt is due to the herbivory of the island's non-native white tailed deer population.

By the mid-1920s, Roger Sherman and George McConnell owned all of Section 4, with the exception of a twenty-acre parcel owned by Alvar Bournique. This holding included a portion of the Carlson clearing in Section 4. The Manitou Island Association later utilized the Carlson place and the two adjoining clearings as hay fields. ¹²⁹ Giles Merritt recalled that the Carlson place was abandoned during the 1920s. Thereafter the Manitou Island Association used the Carlson barn to store corn and hay. Merritt also remembered fruit trees at the farm, although these were neglected by the association. ¹³⁰

Location and Landscape Setting

A series of three connected, irregularly-shaped clearings is located in the east-central portion of North Manitou Island. The easternmost clearing is the "Carlson place;" at least one of the other two openings may have been the former Henry Stormer farm. It is also possible that one or all three of the clearings date from Nicholas Pickard's tenure on the island, since he purchased all of the northeast quarter of Section 4 in 1857, and his partner Joseph Stringham purchased the northeast quarter of the southeast quarter that same year. The remainder of the section was purchased by Albert W. Bacon in 1862.¹³¹

All of the clearings retain exceptional spatial integrity, with distinct edges and relatively little invasive woody vegetation in the interior (figure 4.80). The terrain is gently rolling. The only remaining structural feature of the Carlson place, an ice house ruin, is situated at the base of a small hill in the southeastern corner of the easternmost clearing (figure 4.81). According to Fritz, this structure was built around 1900. After the Carlsons' departure it was utilized as an ice house by the Manitou Island Syndicate and the Manitou Island Association. The structure was still standing when Shunichi Hagiwara surveyed the site in 1979. The structure distance

¹²⁹ Giles E. Merritt, untitled manuscript, 11 February 1986. Merritt was hired by the Manitou Island Syndicate in autumn 1925.

¹³⁰ Fritz, "History Data Report," 28.

¹³¹ U.S. Land Office, "Tract Books."

¹³² Fritz, "History Data Report," 82.

¹³³ Shunichi Hagiwara, "Building-Structure Inventory."

Figure 4.81. Nels and Sophia Carlson shed ruin, 1996. This dilapidated structure may have been used last by the Manitou Island Association to store ice, which the association annually harvested from Lake Manitou.

upland, near the edge of the clearing, is an intact fencerow consisting of large sugar maple trees.

Contributing Landscape Features

ice house(ruin)

sugar maple fencerow

泰泰泰

FARMS WITH CULTURAL LANDSCAPE REMNANTS

John (and Anna) Maleski Homestead

SW $\frac{1}{4}$, SE $\frac{1}{4}$, Section 21, T32N, R15W

History and Agricultural Data

John Maleski (b. 1886) was the youngest son born to Adam and Mary Maleski. At the time of the 1910 federal census, he was working as a fisherman, and living on the Maleski farm with his parents and his brother Paul. During this time he may have been using the fishing shanties originally constructed by his father on the northeastern shore of the island. In May 1912, John filed a homestead application for SW1/4 SE1/4 and Lot 1 of Section 21, T32N, R14W. The 96.30-acre parcel was perched high on a bluff overlooking the coastal site of the Maleski fishing shanties, and the Manitou Passage to the east. When John Maleski filed his application, he was unmarried.

¹³⁴ U.S. Department of Commerce, Bureau of Census, "Thirteenth [1910] Census of the United States—Population." Maleski began building a house on the property during March 1913, and took up residence there on 10 June of that year. At that time he had ten acres of cleared land in the SW½ SE½ of Section 21. Five years later, when he filed his proof, he and his wife, and their three children, were living on the property in a one-and-a-half-story, three-room frame house. The homestead proof noted that the Maleskis had more than 82 acres of timber land, and fourteen acres of cleared land that were enclosed by a wire fence; they were, however, cultivating only three acres of their farmland. The property also included a frame barn measuring 20' x 30' on Lot No. 1, as well as a hen house and possibly a hog house. Witnesses to John Maleski's 1918 testimony were Herman Prause and Paul Maleski, of North Manitou Island, and Harold E. Voice and John L. Paetschow of Leland. The final patent for the homestead was awarded on 24 June 1919. 135

According to the manuscript schedules for the 1920 federal census, John and Anna Maleski's household included four children: Gertrude (age 5), Raymond (age 3), Ellis (age 23 mos.), and John (age 3 mos.). The Maleskis resided on a farm, which they owned; John Maleski was listed as a farm laborer, working on his own account. 136 John also probably continued to fish during this time. A few years later, however, he was employed as the orchard manager for the Manitou Island Association. According to his nephew, Paul Maleski, Jr., John Maleski received training in orchard management from Michigan Agricultural College in East Lansing. 137 A news item in the 25 March 1926 issue of the Leelanau Enterprise reported that "Paul Maleski of North Manitou is in town waiting for a chance to cross. He is employed by the island Syndicate in their orchards and spent the winter studying at the Michigan State College." The paper probably confused Paul Maleski with his brother John, since according to the MIA accounts journal, John Maleski received \$83.08 in March 1926 for "Feb. pay while at school," and also incurred traveling expenses during that month. 138 The MIA also paid Ann Maleski \$15.50 in 1927 for "farmhouse washing." 139

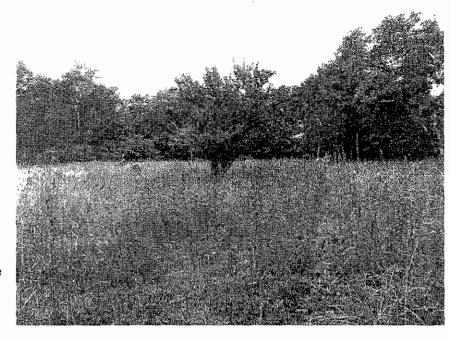
Unlike his brother Paul, John Maleski seems to have engaged only in subsistence agriculture at his homestead. His primary source of income was employment with the Manitou Island Association, which he supplemented by fishing. He and his family left North Manitou Island in 1928 or 1929, and their island homestead subsequently was purchased by the Manitou Island Association. According to Paul Maleski, Jr., the MIA utilized the John and Ann Maleski residence as an ice house. 141

Location and Landscape Setting

The John Maleski homestead site is located approximately two miles north of North Manitou Village. All that remains of the site is a small clearing located near the edge of the bluff, which drops off sharply toward the shore of Lake Michigan. The Maleski family's fish shanties were located below the bluff, along the shore. From the

- Number 02852; Receipt No. 640995/2186167; Final Patent No. 690135, National Archives and Records Administration, Washington, D.C.; U.S. Land Office, "Tract Books." The Leelanau County tract book lists the date of application as 10 May 1912. The name is spelled "Maleske" on the homestead application.
- ¹³⁶ U.S. Department of Commerce, Bureau of Census, "Fourteenth [1920] Census of the United States—Population."
- ¹³⁷ Paul Maleski, Jr., interview with the authors, 26 July 1997.
- ¹³⁸ Manitou Island Association Accounts Journal.
- 139 Thid.
- ¹⁴⁰ Some of the sources conflict with regard to dates. According to Rusco (North Manitou Island, 19, 71-72), the family sold their North Manitou property in 1928, and moved to the mainland in 1929; However, Fritz ("History Data report," 71) states that the MIA acquired the property sometime around 1940.
- Paul Maleski, Jr., interview with the authors, 26 July 1997.

Figure 4.82. John and Anna Maleski homestead site, 1996. Because it offers spectacular views of South Fox Island and the Manitou Passage, the small clearing of the former John and Anna Maleski homestead is a popular camp site for North Manitou visitors. The aesthetic quality of the clearing, and the presence of several nonnative plants, identifies the site as an anthropogenic landscape.



edge of the bluff, which is lined with paper birch and hemlock trees, one can glimpse spectacular views of the Michigan mainland and, in the distance toward the north, South Fox Island. The clearing is a popular camping site.

Completely surrounded by forest, the clearing is less than ten acres in extent. It is occupied by a scattering of four apple trees, three sugar maples, and one black cherry tree (figure 4.82). There is a patch of Kentucky bluegrass (Poa sp.) near one of the apple trees, and large colonies of black and red raspberries. Black raspberries appear to be especially invasive in the northwestern corner of the clearing, where there also is a group of black locust trees along the edge of the forest. Nearby is an apple tree and two sugar maple trees. The clearing is being invaded by a few woody species, including striped maple (Acer pensylvanicum), sugar maple, and black cherry.

Fritz reported that the John Maleski house was standing in autumn 1985, although it was then "in an advanced state of decomposition." Fritz also stated, curiously, that "several of the John Maleski outbuildings have fallen nearly flat from decrepitude." Fritz's description of the John Maleski property is puzzling because, according to Maleski's nephew, there were no other outbuildings at the site. Fritz may have confused this location with the farm of Adam Maleski, which is located less than one mile inland from the John Maleski homestead site.

Contributing Landscape Features

Sugar maple trees

Apple trees

Black locust trees

Kentucky bluegrass

¹⁴² Fritz, "History Data Report," 72; Paul Maleski, Jr., interview with the authors, 26 July 1997.

Frederic Beuham / Stark Bros, Orchard

N 1/2, NE 1/4, & S 1/2, NW 1/4, Section 33, T-32N R-15W

History and Agricultural Data

Frederic M. Beuham introduced large-scale commercial fruit farming to North Manitou Island during the 1880s. An unmarried, native-born citizen, Beuham moved from Olivet, Michigan, to North Manitou Island in 1881. He homesteaded 160 acres of land in the N½ NW¼, SE¼ NW¼ and the NE¼ SW¼ of Section 33, T31N, R14W. Information on Beuham's homestead application suggests that he was a war veteran, and that he had a physical disability stemming from his military service. Beuham testified that he spent summers on the island improving his claim, and winters on the mainland, boarding with his brother at either Petoskey or Olivet, Michigan. In Petoskey, Beuham sold fruit trees during the winter months. He was absent from the island from December until May, "the homestead being on an island and, and [sic] not fit for residence, winter's for invalid soldier." 143

In May 1890, Beuham testified that his claim was mostly second-growth maple forest that had been "cut off by N. Pickard so the reports, about 15 or 20 years ago." He stated that the property was "ordinary agricultural land" that was most valuable for fruit raising. In 1881, with the assistance of a person named "Clark," he built a house measuring 18' x 18,' with one window and one door. He cleared one acre of land that year, and set out fruit trees the following spring. He later built a second house that measured 14' x 24,' one-anda-half stories high, with two doors and five windows. As of 1890, Beuham had cleared twelve acres of land. During each of the previous four seasons he had produced 300 bushels of potatoes and three tons of hay on ten acres of farmland. In addition, Beuham had 500 fruit trees and vines growing on his homestead. His houses were furnished with the "usual Bachelor's outfit," and he owned two horses, two plows, one wagon, hoes, axes, and other farm equipment. He also had purchased three heifers, which were being boarded at Bay Springs, Michigan. Beuham's witnesses were North Manitou residents John Peterson, a fisherman, and Aron Swenson, a fisherman and farmer. 144

Frederic Beuham later acquired additional acreage in sections 29, 32, and 33, perhaps to expand his fruit operation. On 10 May 1894, however, Beuham transferred his land to the well-known fruit nursery, Stark Bros. Nursery & Orchard Co. of Louisiana, Missouri, for \$120 dollars. This transaction involved 922.9 acres of land in the following areas of T32N, R14W: the W½ of Section 28; the N½ of the SE¼, the N½ of the SW¼, and lots 1 and 2 in Section 29; the E½ of the NE¼ and lots 1, 2, 3 and 5 in Section 32; the SW¼ of the NW¼ of Section 33; and the NW¼ of the SW¼ in Section 33. Seven days later, Beuham, who listed his address as Wheaton, Illinois, entered into a legal agreement with Stark Bros. The nursery firm

¹⁴³ Homestead Application No. 8188, National Archives and Records Administration, Washington, D. C. Beuham's application was made on 4 June 1881, the final proof was made on 6 June 1890, and his claim was patented on 4 February 1891.

¹⁴⁴ Ibid.

¹⁴⁵ Fritz, "History Data Report," 10.

¹⁴⁶ Leelanau Deeds, Liber 24, 38.

agreed to ship, by railroad and lake steamer, a total of 1,500 pear and 2,500 apple trees to Beuham on North Manitou. The shipments were to be made sometime during the fall of 1894 or spring of 1895. In addition, Stark Bros. were to carefully plant and care for the trees on the 645-acre farm, which consisted of the following parcels in T32N R14W: lots 1 and 5, and the E½ of the NE¼ of Section 32; the SW¼ of the NW1/4 and the NW1/4 of the SW1/4 of Section 33; the SE1/4 of the SE1/4 of Section 29; lots 1 and 2 of Section 29, and the W1/2 of Section 28. Beuham, along with S. R. Boardman of North Manitou Island, and "Mann Bros." of Two Rivers, Wisconsin, agreed not to dispose of the farm without first obtaining the written consent of Stark Bros. Beuham agreed to deliver to Stark Bros. any three pear or two apple crops yielded by the trees, to be selected by Stark Bros., within a period of 15 years after planting the trees. Beuham also agreed that he would send Stark Bros. a written assessment of the condition of the crop 30 days before the harvest. 147 The arrangement between Stark Bros. Nursery Co. and Beuham apparently was not unusual during the late nineteenth century. According to Denice Lucas, a current spokesperson for the Stark Bros. firm, "it was common practice during that time for the company to sell trees to a commercial orchardist, and accept the orchardist's land as a binder, with the land used as collateral until the trees were paid off." The company, however, no longer has any records dating from the 1890s.148

Beuham apparently defaulted on his agreement with Stark Bros., for on 31 January 1899 the company sold the North Manitou Island fruit farm and other land comprising 922.91 acres to Franklin and Benjamin Newhall of Chicago for \$1,100. The sale included the $N\frac{1}{2}$ of the SE\frac{1}{4} and the $N\frac{1}{2}$ of the SW\frac{1}{4} and lots 1 and 2 of Section 29 (243 acres); the SW1/4 of the NW1/4 and the NW1/4 of the SW¹/₄ of Section 33 (80 acres); Lot 2 of Section 29 and lots 2 and 3 of Section 32 (116.1 acres); the E½ of the NE¼ and lots 1 and 5 of Section 32 (163.81 acres); the W½ of Section 28 (320 acres), T32N, R14W.149 Perhaps Beuham's financial difficulties were tied to those of his business partner, Silas Boardman, who also was forced to sell his island property to the Newhalls at approximately the same time. The Newhalls, who were Chicago-based wholesale fruit dealers, continued to operate the North Manitou orchards until ownership and management of the property was assumed by the Manitou Island Syndicate during the early 1920s. William Stark may have maintained an interest in the orchard through a personal connection with the Newhalls (figure 4.83). The Stark family purchased one of the Cottage Row houses and vacationed on the island during the Newhall era.

Giles Merritt recalled that two varieties of apples, 'wealthy' and 'spy,' grew in the huge orchard, which was known as the "Frank Farm." Apples of both varieties ripened later than the apples growing near the village. 150 Vera Crites Goos, who lived on the island

¹⁴⁷ Leelanau Deeds, Liber 23, 168-169. The agreement was received for record on 18 August 1894.

¹⁴⁸ Denice Lucas, Stark Bros. Nursery Co., telephone interview by Eric MacDonald, 23 February 1998.

¹⁴⁹ Leelanau Deeds, Liber 24, 318.

¹⁵⁰ Fritz, "History Data Report," 28.



Figure 4.83. Nationally prominent nurserymen J. H. Hale and William Stark pose in the North Manitou Island apple orchard formerly owned by Frederic Beuham, ca. 1900. Most of the orchard's fruit trees were planted by Stark Bros. Nursery & Orchard Co. during the 1890s. For several summers during the early twentieth century, William Stark and his family vacationed in one of the Cottage Row summer houses.

during the 1930s, recalled that the apples grown on North Manitou Island were special, the result of experimental grafting. Her daughter, Lorriane, recalled:

... we'd walk out in these beautiful orchards and we'd see three or four kinds of apples growing on one tree—yellow apples on one side, green on another and red on another. That was part of the attraction of North Manitou. And sometimes, if I'm not mistaken, when anybody had company . . . we'd walk out into these beautiful orchards to show them trees that had several kinds of apples growing on one tree. 151

The MIA may have continued commercial harvesting apples from the orchard into the 1930s. By the late 1930s, however, the annual apple crop was left in place for the MIA deer herd.¹⁵²

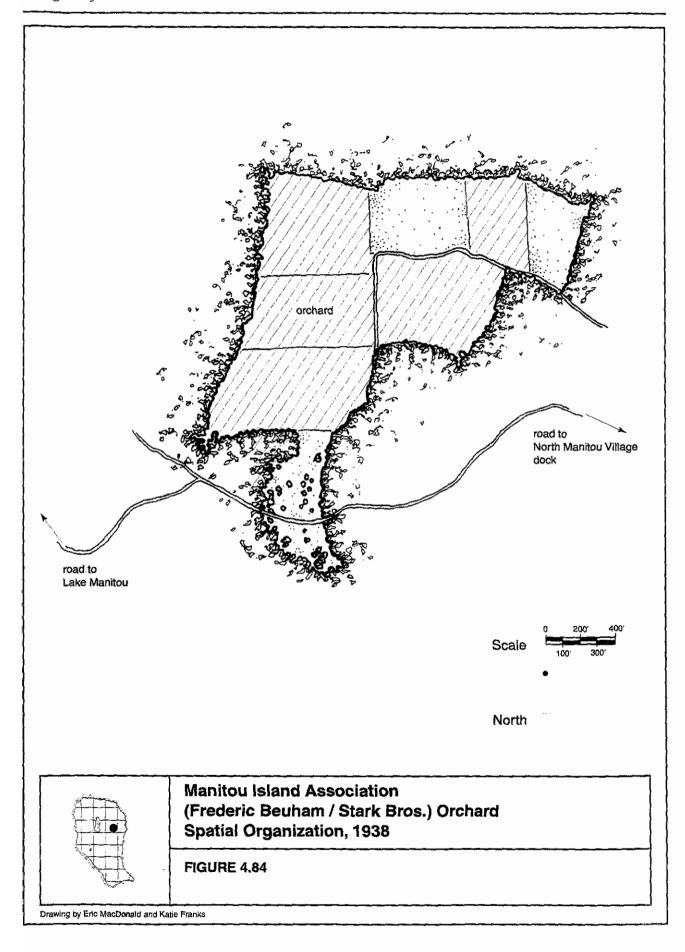
Location and Landscape Setting

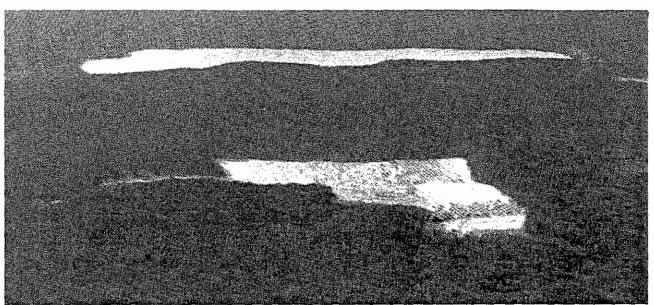
The Frederic M. Beuham fruit farm, popularly known as the "Frank Farm," is located in the northeastern portion of the island, about one-half-mile west of North Manitou village. ¹⁵³ The orchard is reached via a road that leads from the historic village dock location to Lake Manitou. The road crosses a small meadow-like clearing that extends northward into the much larger orchard clearing (figure 4.84). A few large trees are scattered throughout this smaller clearing, which is otherwise open, suggesting that it once may have been a pasture, or the location of Beuham's homestead. A small grove of American chestnut (Castenea dentata) trees is located a short distance west of the trail that leads southward from this area of the Beuham clearing. The nine chestnut trees, some of which have multiple trunks, are situated in the woods, and are surrounded by overstory trees of big-tooth aspen (Populus grandidentata), sugar maple, black

¹⁵¹ Vera Crites Goos, interview with Betty L. Mann, 15 and 18 June 1993, audio tape filed at Leelanau Historical Museum, Leland, Mich.

¹⁵² Lundquist, interview.

¹⁵³ How the name "Frank" became attached to the orchard is not known. Perhaps the name refers to Franklin Newhall.





cherry, beech, and ironwood (Ostrya virginiana). American chestnut trees are not native to this portion of North America, and probably were planted by Beuham.¹⁵⁴

Approximately 180 acres in extent, the Beuham orchard is the largest clearing on the island, rivaled only by the Crescent townsite, North Manitou Village and its adjacent orchards, and the Bournique/cemetery area (figure 4.85). The clearing is irregularly shaped. The terrain is gently undulating in the northern, upland portion, and relatively flat in the southern portion (figure 4.86). Within the clearing are several large patches of sandy, eroded soil, now mostly vegetated with drought-tolerant grasses and lichens. Land patterns discernible in aerial photographs dating from 1938 to the early 1970s suggest that the vast clearing historically was divided into several smaller areas devoted to fruit trees and other crops. Approximately 60 per cent of the clearing was devoted to orchards in the 1938 photograph, and the land patterns suggest that as much as 75 per cent previously had been used for this purpose. A large section of orchard in the low, southern part of the clearing appears to have been removed sometime after 1938.155 The remaining orchards seem to be divided into three sections that were separated by areas of open land in the north-central and extreme northeastern portions of the clearing.

Using the 1938 aerial photograph as a baseline, the Beuham orchard appears to retain remarkable spatial integrity. The size and shape of the clearing have changed little during the past sixty years, and the forest/clearing edge remains distinct. There are, perhaps, 700-1,000 living fruit trees in the orchards. Most of the relict specimens appear to be apple trees, many of which remain robust and healthy-looking (figure 4.87). The particular varieties represented in the orchard have not been identified. Most of the trees probably date from the Stark Bros. plantation, although others may have been added by the Newhalls, or by the Manitou Island Syndicate.

Figure 4.85. Aerial view of the Frederic Beuham orchard (Lake Manitou in the distance), looking westward, winter 1994. The Beuham orchard is one of the largest agricultural clearings on North Manitou Island.

¹⁵⁴ Brian T. Hazlett and Robert J. Vande Kopple, The Terrestrial Vegetation and Flora of North and South Manitou Islands, Sleeping Bear Dunes National Lakeshore, Leelanau County, Michigan (Douglas Lake, Mich.: University of Michigan Biological Station, 1983), 57-58

¹⁵⁵ U.S. Department of Agriculture, aerial photographs, 1938, Sleeping Bear Dunes National Lakeshore, Empire, Mich.

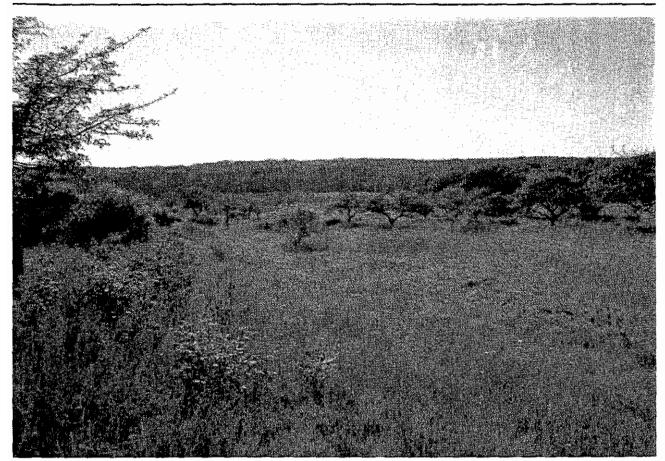


Figure 4.86. Frederic Beuham orchard, 1996. The orchard is one of the most visually dramatic cultural landscapes of North Manitou Island. The aesthetic experience of this vast clearing, which is punctuated by regularly-spaced rows of several hundred fruit trees, is heightened by the dense forest that encloses the space.



Figure 4.87. Frederic Beuham orchard, 1996. Many of the fruit trees growing in the northeastern quadrant of the Beuham orchard are large, robust specimens. Unfortunately, the orchard has not been inventoried to determine whether any important historic apple varieties exist at the site. The character-defining features of this orchard—its immense size, monotypic plantings, and highly regimented planting pattern—identify it as a landscape of commercial, or paleotechnic, agriculture.

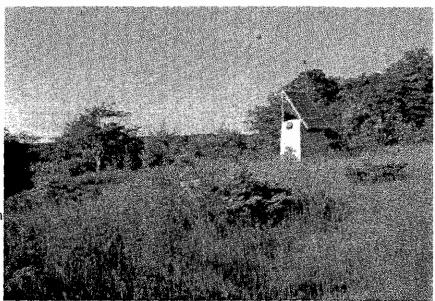


Figure 4.88. National Park Service radio tower, Frederic Beuham orchard, 1996. Although the Beuham orchard is located within a "potential wilderness" area, the NPS recently constructed a modern radio tower amidst the rows of historic apple trees located in the northeastern corner of the clearing.

Including the southern orchard, which was intentionally removed after 1938, as many as 2,500 trees may have been planted in the clearing. The remaining orchards consisted of approximately 1,800 trees. The edges of the clearing appear to have changed very little since the late 1930s.¹⁵⁶

There are no visible, historic building or structural remains on the property. Beuham's houses may have been removed by subsequent owners, since neither Stark Bros. nor the Newhalls resided on the holding. Beuham himself may have regarded these buildings as temporary shelters, since both of his homestead application witnesses testified that the houses were not habitable during all seasons. 157 Former North Manitou residents also report that a barn once stood somewhere on the property.¹⁵⁸ A portion of this structure may be depicted in an historic photograph featuring apple pickers on North Manitou Island sometime between 1910-1920 (see figure 3.5). The barn may have been built by the Newhalls, and later utilized by the Manitou Island Syndicate and the Manitou Island Association until fruit harvesting on the property ceased sometime during the late 1930s or early 1940s. In the northeastern corner of the site, surrounded by large apple trees, is a small white metal and wood radio tower (figure 4.88). This structure was erected by the National Park Service in the 1980s. Although it is not large, the tower detracts from the overall aesthetic quality of the site.

Contributing Landscape Features

clearing

dead apple trees and stumps

apple trees

roadway

American chestnut trees

Non-Contributing Landscape Features

radio tower

photographs from a 1976 timber survey completed for the Manitou Island Association, original photographs on file in the Angell Foundation Collection, Sleeping Bear Dunes National Lakeshore, Empire, Mich.

¹⁵⁷ Homestead Application No. 8188, National Archives and Records Administration, Washington, D. C.

¹⁵⁸ Rita Hadra Rusco, interview by Eric MacDonald, 25 July 1997, notes filed at Sleeping Bear Dunes National Lakeshore, Empire, Mich.



Figure 4.89. Hendrick Frederickson house and wharf on the southwestern shore of North Manitou Island, 1897.

Hendrick Frederickson Farmstead

SW 1/4, NE 1/4, Section 20, T31N R15W

History and Agricultural Data

Hendrick Frederickson (b. 1841) emigrated from Denmark in 1870. In 1883, he purchased 68 acres near the southeastern end of North Manitou Island, in Section 22 of T31N, R14W. He later acquired additional land on the southwestern shore of the island in Section 20 (figure 4.89).¹⁵⁹ Frederickson probably engaged in fishing and limited, subsistence farming on this land. According to Rusco, the Fredericksons were related to another North Manitou Island family, the Paetschows. Hendrick Frederickson was a farmer and fisherman who owned his own boat. He later built a wharf with two fish houses, and employed woodchoppers. 160 Frederickson may not have been living on this property in 1900, since the federal census of that year lists him as a fisherman who was living in a rented house. Although he had been married twenty years, his wife was not residing with him on North Manitou Island. Frederickson may have moved to Bailey's Harbor, Wisconsin, shortly after the turn of the century. 161 Jean Lundquist recalled that the Frederickson place was the favorite picnic spot of North Manitou's summer residents during the late 1930s through the 1950s.¹⁶²

¹⁵⁹ U.S. Census Office, "Twelfth [1900] Census of the United States— Population;" Fritz, "History data Report," 87.

160 Rusco, North Manitou Island, 78

161 U.S. Census Office, "Twelfth [1900] Census of the United States—Population;" U.S. Department of Commerce, Bureau of Census, "Thirteenth [1910] Census of the United States—Population." James P. Walle to Eric MacDonald, 16 July 1997, Department of Landscape Architecture, University of Wisconsin-Madison.

162 Lundquist, interview.



Figure 4.90. Cultural vegetation at the Hendrick Frederickson place, 1996.

Location and Landscape Setting

The remains of the Frederickson place consist of a small, oblong-shaped clearing located on the southwestern shore of the island. The site is reached via a trail that extends northward to the Crescent townsite and eastward toward the Bournique place and the eastern shore road. The land rises dramatically to the east of the clearing, which is bordered by a densely forested hillside. The clearing offers spectacular views of Lake Michigan, South Manitou Island, and the Sleeping Bear Dunes. Among campers and backpackers, the Frederickson Place is a favorite spot for watching the setting sun on a summer evening.

No surface evidence of buildings or structures remain at the Frederickson place. Rusco reports that the house was built near the edge of the dune, and eventually toppled into Lake Michigan. The primary cultural feature of the Frederickson place is the clearing itself, the boundaries of which remain relatively distinct, although woody vegetation is advancing along the edges of the space. A cluster of seven apple and pear trees located along the northern edge of the clearing may mark the vicinity of the house site. There also are large, open-grown sugar maple trees nearby, and wild grape vines growing along the edge of the bluff. (figure 4.90).

Contributing Landscape Features

clearing

pear trees

apple trees

sugar maple trees

John Swenson / Cunningham Home Site

SE 1/4, SW 1/4, Section 3, T31N R14W

History and Agricultural Data

John Swenson and his brother, Peter Swanson, initially settled on the western side of North Manitou Island during the 1880s. John later moved to the eastern side of the island, where he and his wife, Johanna, settled at a site is located along the eastern shore road approximately one mile south of North Manitou Village. John Swenson owned his own boat, which he used for fishing, and for transporting freight between the island and Leland. In 1901, Swenson took the contract to carry mail between Leland and North Manitou Island. The Swensons' daughter, Augusta, worked in the village hotel. In 1905 she married Fred Samuelson, keeper of the North Manitou light from 1898 through 1909. Glara, another daughter of John and Johanna Swenson, died 18 May 1905; she was buried in the island cemetery. Johanna Swenson died on 26 March 1911; she may be buried somewhere on the western side of the island.

The Swenson home site later was occupied by Melvin and Ellen Cunningham, who lived on the island from about 1906 until 1915. They had twelve children, two of whom died in infancy. Their daughter, Martha, polished silverware for Miss Katie Shepard's tearoom at Cottage Row. Melvin Cunningham was Peter Stormer's blacksmith. In addition, the Cunninghams took in boarders and serviced the logging operation. They raised milk cows, pigs, and chickens, and tended a large vegetable garden. 168

Location and Landscape Setting

The Swenson/Cunningham Place is located along the eastern shore road, approximately one mile south of North Manitou Village and one-half-mile south of the island school. It now consists of only a small clearing in the woods, offering views of the Manitou Passage and the Michigan mainland to the east. West of the Swenson/Cunningham place is the former Manitou Island Association's "South Cherry Orchard," now also only a clearing that is being invaded by small, woody vegetation.

Contributing Landscape Feature

clearing

John L. and (Wanda?) Johnson Farmstead

NE 1/4, SW 1/4, & SE 1/4, NW 1/4, Section 18, T-31N R-15W

History and Agricultural Data

Little historical information exists about the John L. Johnson family. The Johnsons, who appear in the 1910 federal population census of North Manitou Island, are listed as John, age 63, and his wife

164 Rusco, North Manitou Island, 61, 105.

¹⁶⁵ Leelanau Enterprise, 25 July 1901.

Rusco, North Manitou Island, 61, 105.Peter Swanson also worked as a mail carrier, transporting mail the island.

¹⁶⁷ Fritz, "History Data Report," 17.

¹⁶⁸ Rusco, North Manitou Island, 53.

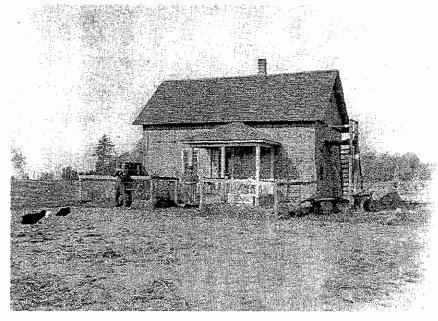


Figure 4.91. John L. Johnson farm house.

(Wanda?), age 67; both had emigrated from Sweden, and had become naturalized U. S. citizens in 1887. They had three living children, although none were living with them in their North Manitou Island household. Along with Adam Maleski, John Johnson was one of only two North Manitou farmers identified in the 1910 census. ¹⁶⁹ According to Rusco, the Johnsons owned a boat and a dock. ¹⁷⁰ An historic photograph of the Johnson house depicts a simple one-and-a-half-story, side-gable dwelling with wooden shingle cladding (figure 4.91). The farmstead was abandoned by the time Giles Merritt lived on North Manitou during the late 1920s. ¹⁷¹

Location and Landscape Setting

The former John and (Wanda?) Johnson farm is located on the southwestern shore of North Manitou Island, approximately two miles south of the townsite of Crescent, and three-quarters of a mile north of the Hendrick Frederickson place. Like the Frederickson property, the former Johnson farm now consists of only an oblong-shaped clearing positioned atop the bluff overlooking Lake Michigan. No visible evidence of buildings or structures remains at the site, and there is no relict cultural vegetation.¹⁷²

Contributing Landscape Feature

clearing

"Fat Annie's" Place

NE 1/4, NW 1/4, Section 21, T-31N R-15W

History and Agricultural Data

The identity of "Fat Annie" is a mystery, although Rusco suggests that she may have cooked and laundered for one of the island logging camps. According to island lore, Annie's son worked for Silas Boardman during the early 1890s. 173 Another legend claims that

¹⁶⁹ U.S. Department of Commerce, Bureau of Census, "Thirteenth [1910] Census of the United States—Population," Fritz, "History Data Report," 16.

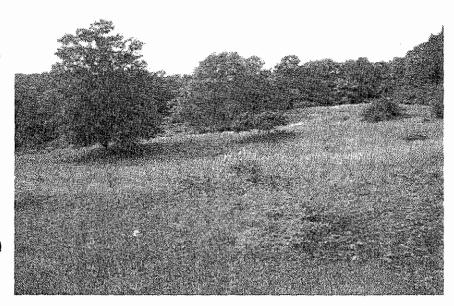
¹⁷⁶ Rusco, North Manitou Island, 78.

¹⁷¹ Fritz, "History Data Report," 28.

¹⁷² Rusco (North Manitou Island, 78) that the remains of the house foundation and lilacs exist at the site. These features were not apparent in 1997.

¹⁷³ Rusco, North Manitou Island, 79.

Figure 4.92, "Fat Annie's" place, 1996. This small, circular clearing, which is occupied by only three trees, represents the modest scale that characterized subsistence agriculture on North Manitou Island, Most of North Manitou's immigrant farmers, many of whom settled homesteads near the southern end of the island during the late nineteenth century, probably developed clearings of no more than a few acres. Farm sites such as the homestead of Andrew Anderson and other pioneer agriculturists now are indiscernible, or virtually inaccessible. Due to its good spatial integrity and location along a major island trail, "Fat Annie's" place is an excellent resource for interpreting family-based subsistence agriculture on the island.



Fat Annie's husband was tragically killed while working in one of the Crescent lumber camps.¹⁷⁴ The size of the clearing at Fat Annie's home site suggests that she may have engaged in subsistence agriculture.

Location and Landscape Setting

The site known as "Fat Annie's" is located in the south-central portion of the island. It now consists of a small, somewhat circular clearing that is positioned on a south-facing slope. The southern edge of the clearing is bordered by a roadway that connects the Frederickson place and the west shore road with the east shore road. Blackberries are invading the clearing along the road edge, and a single apple tree is growing on the slope inside the clearing. Nearby, there is a sugar maple tree and a black cherry tree. A depression alongside the black cherry tree may mark the location of the house (figure 4.92). No building foundations were located in 1997. Jean Lundquist recalled that a small, dilapidated lean-to structure existed "in the side of the clearing" during the late 1930s through the 1950s. 175 Rita Hadra Rusco once observed the remains of an old foundation at the site, however, logging authorized by the Angell Foundation during the 1970s "obliterated the old fence lines and changed the ground surface."176

Contributing Landscape Features

clearing

apple tree

depression

sugar maple tree

¹⁷⁴ Lundquist, interview.

¹⁷⁵ Lundquist, interview.

¹⁷⁶ Rusco, North Manitou Island, 79.

HOMESTEADED FARMS WITH NO EXTANT FEATURES

Andrew Anderson Homestead

Lot 3, Section 20; SW $^{1}/_{4}$ NW $^{1}/_{4}$ and W $^{1}/_{2}$ SW $^{1}/_{4}$ Section 21; Lot 1, Section 28, T31N R14W

History and Agricultural Data

Andrew Anderson was living on North Manitou Island at the time of the 1870 federal population census. According to the manuscript schedule for the census, he was 47 years old, a native of Norway, and working as fisherman.¹⁷⁷ On 6 September 1875, Anderson filed a homestead entry for 159.40 acres of land in Sections 20, 21 and 28 of T31N, R14W. He indicated that he was a single man, over 21 years old, and intended to become a citizen of the United States. Anderson settled on his claim in March 1876. He erected a log house measuring 17' x 24', and a frame barn with dimensions of 20' x 37'; by 1882, Anderson had cleared 10 acres of woodland, and chopped an additional 5 acres.¹⁷⁸

The manuscript schedules for the 1880 federal census identify Andrew Anderson as a single farmer from Sweden who owned his farm. According to the 1880 census of agriculture, Anderson had ten acres of tilled land, and 150 acres of woodland. His farm was valued at \$1,000, while his products had a market value of \$300 in 1879—the greatest of North Manitou Island's farmers at the time. He had one acre planted to barley, which yielded ten bushels, one acre of corn that yielded 50 bushels, and one acre of oats that yielded ten bushels. Two acres of potatoes had produced 150 bushels. Anderson also had cut 75 cords of wood, with a market value of \$150. He owned two "other cattle," and six poultry. During the previous year he had slaughtered four cattle, and his poultry had provided thirty eggs. 179

When final testimony for his homestead proof was given in August 1882, Anderson had five acres under cultivation, and had raised crops on the land for five consecutive years. Anderson's witnesses were North Manitou residents Gustaf Olson Swan and Daniel Buss. 180 In 1888, Anderson paid cash for an additional forty acres in the SW1/4 of the SW1/4 of Section 15, T31N, R14W in 1888. 181 It appears that Anderson either died or departed North Manitou Island during the 1890s, since he is not listed in the federal census of population for 1900.

177 U.S. Census Office, "Ninth [1870] Census of the United States— Population," microfilm copy of manuscript schedules, Library of Michigan, Lansing.

178 Homestead Entry #7013, Final Certificate #5308, National Archives and Records Administration, Washington, D.C. Anderson's homestead was for Lot 3 (21.4 acres), Section 20, SW¹/₄ NW¹/₄ and W¹/₂ SW¹/₄ (77.3 acres) Section 21, and Lot 1 (20.7 acres), Section 28, T31N R14W, a total of 159.4 acres of land. The application was made on 6 September 1875, and the final proof made on 10 October 1882.

179 U. S. Census Office, "Tenth [1880] Census of the United States—Population;" U.S. Census Office, manuscript schedules, Federal Agricultural Census, microfilm copy at the State Archives of Michigan, Lansing.

¹⁸⁰ Homestead Entry #7013, Final Certificate #5308, National Archives and Records Administration, Washington, D.C.

Peter Hansen Homestead

E1/2 NW1/4, Section 21, T31N R14W

History and Agricultural Data

Peter Hanson homesteaded 80 acres of land in the E1/2 of the NW1/4 Section 21, T31N, R14W. The application was made on 4 October 1886, and the final proof was recorded on 2 February 1895. 182 A Danish immigrant, Hansen built a 14' x 16' log house by 29 March 1887. He also constructed a barn measuring 16' x 16.' Hansen lived on his claim with his wife and their son and two daughters. He cultivated approximately four acres of land during their first year of residence. When final testimony was given in May 1894, Hansen, then 45 years of age and a U.S. citizen for two years, had improved eight acres. Hansen had constructed fences on his North Manitou Island property, and had cultivated approximately eight acres of land for seven seasons. Witnessing on Hansen's behalf were fellow Danes and North Manitou residents, Abendrick Frederickson, age 51, and Andrew Paetschow, age 36. The final patent for Peter Hansen's homestead was issued on 28 May 1895. 183 Peter Hansen and his family may have left North Manitou Island shortly after acquiring title to their land in 1895, since the 1900 manuscript schedules do not list them as island residents.

Lars Christopher Homestead

E½ SW¼, and W½ SE¼, Section 21, T31N R14W

History and Agricultural Data

According to land records for North Manitou Island, Lars Christopher homesteaded 160 acres of land in the E½ of the SW¼ and the W½ of the SE¼ of Section 21 in T31N, R14W. His application was made on 19 December 1884, and the final proof was made on 5 November 1890. Little else is known about Christopher. His homestead application documents have not been located, and he does not appear in either the 1880 or 1900 federal population census. 185

Nicholas Feilen Homestead

E ½ SE ¼ Section 21, T31N, R14W; Lot 1 Section 27, T31N R14W; Lot 4, Section 28

History and Agricultural Data

At the time of the 1900 federal population census, Nicholas Feilen was a boarder with Albert Firestone, a farm laborer. Feilen, born in August 1852 in Illinois, worked as a carpenter. 186 He is believed to have arrived on North Manitou Island sometime during the late 1880s or early 1890s. 187 According to Josephine Hollister, Feilen and his partner traveled to the island from Chicago in 1894 at the behest

- U.S. Land Office, "Tract Books;"
 U.S. Land Office, "Tract Books."
- ¹⁸⁵ Homestead Application No. 8910; Final Certificate No. 6903, National Archives and Records Administration, Washington, D.C.
- 184 U.S. Land Office, "Tract Books."
- ¹⁸⁵ U. S. Census Office, "Tenth [1880] Census of the United States—Population;" U.S. Census Office, "Twelfth [1900] Census of the United States— Population."
- ¹⁸⁶ U.S. Census Office, "Twelfth [1900] Census of the United States—Population." Fritz ("History Data Report," 84) states that the brothers Nicholas and John Feilen were emigrants from Germany. The 1900 census manuscript indicates that Nicholas Feilen's parents were born in Germany. Nicholas, however, was born in Illinois.
- ¹⁸⁷ Rusco, North Manitou Island, 76.

Table 4.1

Crops Produced by Nicholas Feilen on His North Manitou Island
Homestead, 1904-1908

Year	Commodity			
	Corn (bu.)	Potatoes (bu.)	Oats (bu.)	Rye (bu.)
1904	10	15		
1905	20	12		
1906	12	15	12	_
1907	10	12		25
1908	10	25	~-	20

Source: Homestead Entry #11151; Final Certificate #131334, Marquette, Michigan Land Office; National Archives and Records Administration, Washington, D. C.

of Howard Foote. Feilen constructed the Foote family's cottage on Lot No. 5 of Cottage Row, and also may have built the summer home of the Trudes and other original Cottage Row property owners. Construction of the Riggs cottage, and perhaps others, can be attributed to Nicholas Feilen.¹⁸⁸

Feilen filed his homestead application for 140.20 acres on North Manitou Island on 28 August 1903. His claim was adjacent to the 152.2-acre homestead claim filed by Alvar Bournique also in 1903. Feilen testified that he had built a house in January 1904 on the land located in sections 20, 21 and 28 of T31N, R14W. When he established residence there on 25 February 1904, Feilen was 57 years old and unmarried. The improvements to his homestead included a one-and-a-half-story frame dwelling measuring 12' x 21' that had two outside doors and seven windows. He also had constructed a stable measuring 12' x 20', a barn, a pig pen, a chicken coop, and a well. In addition, John Ole Anderson testified that Feilen had a smoke house on his homestead. He had fenced five acres of land, planted ten apple trees, and had cultivated 35 acres, all of it located in Section 21. Feilen also reported the quantities of agricultural commodities that he had produced on his homestead during the years 1904-1908 (Table 4.1). The final proof of Feilen's homestead application was dated 8 October 1909. Feilen's witnesses were Alvar L. Bournique, Fred Samuelson, Louis G. Dustin of North Manitou Island, and John Ole Anderson, who identified his place of residence as Suttons Bay, Michigan. The patent was issued on 19 May 1910.189

In the manuscript schedules for the 1910 federal population census, Nicholas Feilen's occupation was listed as "general work." Sometime between 1910 and 1920, he may have moved from his homestead, since the 1920 census reports that Feilen was renting the

¹⁸⁸ Hollister, "Summer Resort."

¹⁸⁹ Homestead Entry #11151; Final Certificate #131334, National Archives and Records Administration, Washington, D.C.

¹⁹⁰ U.S. Department of Commerce, Bureau of Census, "Thirteenth [1910] Census of the United States—Population."



Figure 4.93. Brothers Nicholas and John Fellen making maple syrup on North Manitou Island.

home in which he resided. He was 67 years old, and working on his own account as a carpenter. According to Josephine Hollister, Nicholas lived with his brother John Feilen, a cabinet-maker, in a house located east of the island schoolhouse (figure 4.93). Nicholas died during the spring of 1938, and his brother died in Leland the following year; both Feilen brothers are buried in the island cemetery. Today there is little evidence of a house at the Feilen homestead clearing.

Gustaf Olson Swan and Mary Olson Swan Homestead

NE 1/4, Section 21, T31N, R14W

History and Agricultural Data

On 22 October 1878, Gustaf Olson Swan filed a homestead application for 160 acres in the northeastern quarter of Section 21 in T31N, R14W. Swan settled there on 1 April 1879. He built a house, 16' x 32', a "board barn," 20' x 34', and cleared six acres of land. He had six acres in crops for seven seasons. 195 At the time of the 1880 federal census, Gustav O. Swan, age 58, was living with his wife, Mary, age 62; both were Swedish immigrants. The enumerator reported that Swan owned his farm, valued at \$500. He had two acres of tilled land, and 158 acres of woodland. He owned one milk cow, two other cattle, and twenty-four poultry. The Swans had pro-

¹⁹¹ U. S. Department of Commerce, Bureau of Census, "Fourteenth [1920] Census of the United States—Population."

¹⁹² Hollister, "Summer Resort."

¹⁹⁵ Rusco, North Manitou Island, 76-77; Fritz, "History Data Report," 17.

¹⁹⁴ Rusco, North Manitou Island, 82; Fritz, "History Data Report," 84.

¹⁹⁵ Homestead Application No. 7390; Final Certificate No. 6012, National Archives and Records Administration, Washington, D.C.

duced 100 pounds of butter from their cow. One acre of corn had yielded 50 bushels, and an acre of potatoes had produced 75 bushels. Another acre planted to barley did not yield a crop. The total value of the Swan's farm products in 1879 was \$200.¹⁹⁶

The homestead documents indicate that Gusaf Swan died on 15 August 1884. 197 While the homestead records do not indicate the cause of his death, the federal census enumerator noted, in 1880, that Swan had a "cancer on lip." 198 Gustaf Swan's wife Mary continued to reside on the homestead until October 1885. She filed the final proof to the holding on 1 April 1886. The witnesses were Daniel L. Buss of Suttons Bay; and Charles Allard, Sr., Charles Allard, Jr., and Louis Allard, all of Leland. Also testifying on Swan's behalf were Charles J. Allard, Sr., a fisherman at Northport, and Daniel L. Buss, a hotel supervisor in Suttons Bay, who lived on the island until the fall of 1884. 199



SIGNIFICANT NON-FARM PROPERTIES RELATED TO THE AGRICULTURAL COMMUNITY

Historically, most of North Manitou Island's families were sustained by one or a combination of five activities—logging, farming, fishing, recreation, and maritime commerce and navigation. The relative importance of these activities varied over time, but each represents a significant facet of the island's human history during the last century and a half, and each contributed to the making of the cultural landscape as it exists today. Linear features, such as roads and trails, reveal how the various activities related to one another, and suggest the extent to which they were interconnected and synergistic. For example, all of the main non-agricultural endeavors were either dependent upon and/or supported farming on the island. The visible, landscape clues left by the interplay of these activities range from obvious to subtle.

Despite the extensive impact that it had on shaping the island landscape, few intact artifacts related to logging activities still

196 U.S. Census Office, "Tenth [1880] Census of the United States— Population;" U. S. Census Office, "Tenth [1880] Census of the United States—Schedule 2, Productions of Agriculture," microfilm copy of manuscript schedules, State Archives of Michigan, Lansing.

¹⁹⁷ Homestead Application No. 7390; Final Certificate No. 6012, National Archives and Records Administration, Washington, D.C.

¹⁹⁸ U.S. Census Office, "Tenth [1880] Census of the United States— Population."

¹⁹⁹ Homestead Application No. 7390; Final Certificate No. 6012, National Archives and Records Administration, Washington, D.C.

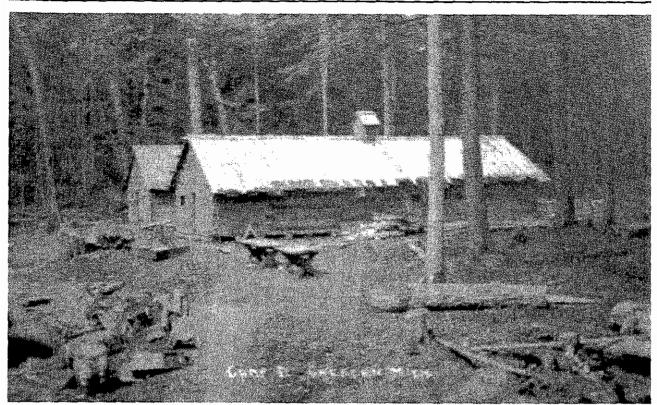


Figure 4.94. One of the logging camps operated on North Manitou Island by the Smith & Hull Lumber Co., ca. 1908-1915.

exist on the island; the Manitou Island Association sawmill is the most outstanding structure representing this theme. The history of logging, however, is manifest in more subtle landscape features such as the species composition and structure of North Manitou's forest communities, the former Crescent railroad grade, and the clearings, earthen depressions, and clusters of apple trees found at the Crescent townsite and at sites such as the Davenport and Stormer logging camps at the northern end of the island (figures 4.94 and 4.95).

Fishing was a subsistence activity that supported many early North Manitou agriculturists. The history of fishing is less evident in the island landscape than logging, partly because extensive coastal erosion has destroyed cultural resources associated with this activity over time. Paul Maleski, Jr., estimated that approximately 200 feet of shoreline has been lost along the northeastern coast of the island due to erosion since the late 1920s. The location of the Maleski family's two fishing camps and dock, as well as the fishing camps of other North Manitou settlers, now lies below the water level of Lake Michigan.²⁰⁰

Fishing in Lake Michigan was an important part of a diversified subsistence strategy for many North Manitou residents. However, two other activities—recreation and maritime navigation—provided island residents with a more reliable source of cash income. Like logging, both of these activities sustained a small local market for agricultural products. During "boom" times, logging operations were a substantial impetus for agricultural production on the island. Intensive logging, however, occurred only in brief spurts

²⁰⁰ Paul Maleski, Jr., audio tape recording, 29 August 1984.



Figure 4.95. Stormer logging camp site, 1996. Small clearings containing earthen depressions, various metal artifacts, and relict cultural vegetation are all that remain of North Manitou Island's numerous twentieth-century lumber camps.

that lasted several years each, whereas recreation and maritime navigation gave the island economy a more stable base. The island resort community and its employees, and individuals who worked for the U.S. Government lighthouse and Life Saving Service, represented a significant local market for agricultural commodities (figure 4.96). In competing with mainland farms, North Manitou's agriculturists faced a serious disadvantage due to greater transportation costs-island farmers incurred additional expenses (in terms of monetary costs, and in terms of time spent away from the farm) conveying their commodities to mainland markets. Once they reached the port, however, island farmers received no higher price for their crops than mainland producers. The presence of an island market allowed, and encouraged, farmers to shift some of their production from traditional cash crops such as wheat and corn, to commodities such as fresh fruits, vegetables, dairy products, meats, ice, and firewood-items that were in demand by the local population, but which were expensive to ship to the island. For North Manitou's farmers, the local population was a "captive" market, albeit a small one.

Significant cultural resources representing both recreation and maritime navigation activities still remain on North Manitou Island. The island lighthouse station, constructed in the 1890s at the southeastern tip of the island, was gradually washed away between 1942 and the 1970s due to shoreline erosion (figure 4.97).²⁰¹ The North Manitou U. S. Life Saving Service Station, however, retains a high degree of integrity. The station complex is now considered to be a nationally-significant historic resource, and recently was designated a National Historic Landmark.

The most significant cultural resource associated with the island's history as a resort, is Cottage Row. The summer houses of Cottage Row retain varying degrees of physical integrity. However, the district as a whole contains a rich array of structures and cul-

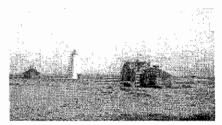


Figure 4.96. U.S. government lighthouse at the southeastern end of North Manitou Island, ca. 1900. The lighthouse station was abandoned in the 1930s, and later destroyed due to shoreline erosion.

²⁰¹ Rusco, North Manitou Island, 17.



Figure 4.97. U.S. Life Saving Station and Cottage Row, ca. 1900. Erected along the crest of an ancient beach ridge, the houses of Cottage Row provided their occupants with excellent views of the U.S. Life Saving Service station and the Manitou Passage. The area between the foot of the ridge and the shoreline originally was reserved as parkland for the common enjoyment of Cottage Row residents.

tural landscape features that represent the history of recreation on North Manitou Island and the larger region of northwestern lower Michigan. Considered together, Cottage Row and the U.S. Life Saving Service Station constitute an important maritime landscape (figure 4.97). Other resources associated with the resort context include the John Newhall Cottage, located west of North Manitou Village, and the Bournique homestead, which also functioned as an agricultural property (see above). Because of their intrinsic significance, and their important links to the island agricultural economy, the North Manitou U.S.L.S.S., Cottage Row, and the John Newhall Cottage are described briefly below.

North Manitou Island U. S. Life-Saving Station

History

The history and cultural resources of the North Manitou Island U. S. Life Saving Service Station have been documented extensively through a recent effort to designate the complex as a National Historic Landmark (NHL). The summary presented below is derived from the 1994 draft national register nomination for the complex, which was prepared by William Herd and Kimberly Mann of Sleeping Bear Dunes National Lakeshore. The nomination is the most thoroughly-documented assessment of the historical significance and physical integrity of the complex to date. Herd and Mann note that the North Manitou station "is the oldest among the three [lifesaving stations on the Manitou Passage] and spans approximately 90 years of history representing the earliest beginnings of the Life-

Saving Service on the Great Lakes. The buildings illustrate the beginnings of the volunteer era, and continue through the expansion of the Life-Saving Service into the Coast Guard era." (figure 4.98). 202

The life-saving station on North Manitou Island was founded in September 1854 when Nicholas Pickard, operator of the island cordwood station, and others submitted a bond to the U.S. Secretary of the Treasury for delivery of a Francis Metallic Surf-Boat. Apparently, Pickard also obtained plans for a boat house that had been designed for use at twenty-eight stations established under authority of an 1854 appropriation. Using these plans, a small wooden structure was built not far from the dock at North Manitou Village. Twenty years later, in 1874, an official U.S. Life-Saving Service Station was established on a 40' x 20' tract that Nicholas Pickard leased to the government for one dollar per year. A Life Boat Station was constructed on the island in 1877, and placed into service that same year with an all-volunteer crew. North Manitou resident Daniel L. Buss was appointed keeper of the station. Beginning in the following year, the North Manitou Station was staffed by a paid six-man crew. Members of the crew probably received housing and board from keeper Daniel Buss, or from one of the other residents of the North Manitou Village area. In 1887 a separate dwelling was built at the North Manitou station to serve as housing for the crew; a small, hiproofed supply building was added to the complex in 1895; four years later the crew built a root cellar. Other structures subsequently were added to the station, including a new capstan and launch ramp, concrete walkways, a flagpole, a windmill and water tower, and a storage building for a generator and flammable materials constructed around 1914-1916. Near the station, some crew members constructed simple vernacular dwellings to house themselves and their families. These buildings were often mobile, and tended to change position with relative frequency over the course of many years.

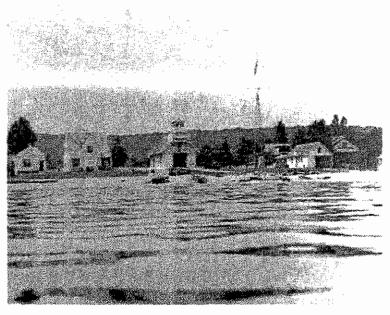


Figure 4.98. U.S. Coast Guard Station, ca. 1930. For nearly eighty years, the presence of the U.S. Life Saving Service station made North Manitou Village the primary social and economic hub of the island. The station represented an important source of employment for residents, and a small, local market for agriculturists.

²⁰² William Herd and Kimberly Mann, "North Manitou Island Life-Saving Station," National Register of Historic Places Registration Form, 26 January 1994, Sleeping Bear Dunes National Lakeshore, Empire, Mich.

In 1915, the North Manitou Island Life-Saving Station became part of the U.S. Coast Guard system.²⁰³ The station operated until 1933, when the crew was reduced to a skeleton force. The U. S. Coast Guard closed the station in 1938, and subsequently sold the buildings and associated property to the Manitou Island Association. The MIA adapted the buildings to support its various ventures on the island, including employee housing. After the MIA lodge was destroyed by fire in 1953, the organization remodeled the life-saving station dwelling to serve as a new lodge, where paying guests received room and board. This use of the property continued after the Angell Foundation assumed control of the MIA in 1950, and finally ended in 1979 when the island was abandoned in anticipation of National Park Service acquisition. Since assuming ownership of the island in 1984, the National Park Service has rehabilitated the buildings and structures of the complex to serve administrative functions, including employee housing.

Buildings, Structures, and Cultural Landscape Features

Cultural Landscape Features

A diverse array of cultural landscape features illustrate the evolution of the North Manitou Island life-saving station complex (figure 4.99). These range from the foundation of the flammable materials shed, constructed in 1914-1916 near the Generator Building, a fire pump well, lookout tower abutments, sidewalks, a sea wall, and ornamental vegetation. The most prominent historic vegetation elements in the district are several large Lombardy poplar trees, which were introduced at the site sometime during the early 1900s. The tall, vertical trees served an aesthetic function, as well as a navigational purpose. Lombardy poplars also were planted at the lighthouse at the southeastern end of the island. Other ornamental vegetation includes Oriental poppies, bridal wreath spirea, Norway maple (Acer plantanoides) and black locust trees, and lilac shrubs, which may date from the Manitou Island Association era.

Hans Halseth House and Shed

Originally located near Nicholas Pickard's dock, the house was relocated to its present site at the northern edge of the complex in 1910. The private residence of surfman Hans Halseth, the house is a one-and-a-half-story, wood-frame, side-gabled structure with a central gabled dormer (figure 4.100). The house was constructed circa 1890; a shed located behind the house was built around 1910.

Volunteer Rescue Station

Located 50 feet southeast of the Hans Halseth house, this structure was built in 1854 from plans obtained by Nicholas Pickard for a volunteer rescue station on North Manitou Island. The one-and-a-half-story, front-gabled building has a heavy timber frame, and walls sheathed with cedar boards (figure 4.101). This structure is believed to

²⁰³ The U.S. Coast Guard was created when the U.S. Life-Saving Service combined with the Revenue Cutter Service.

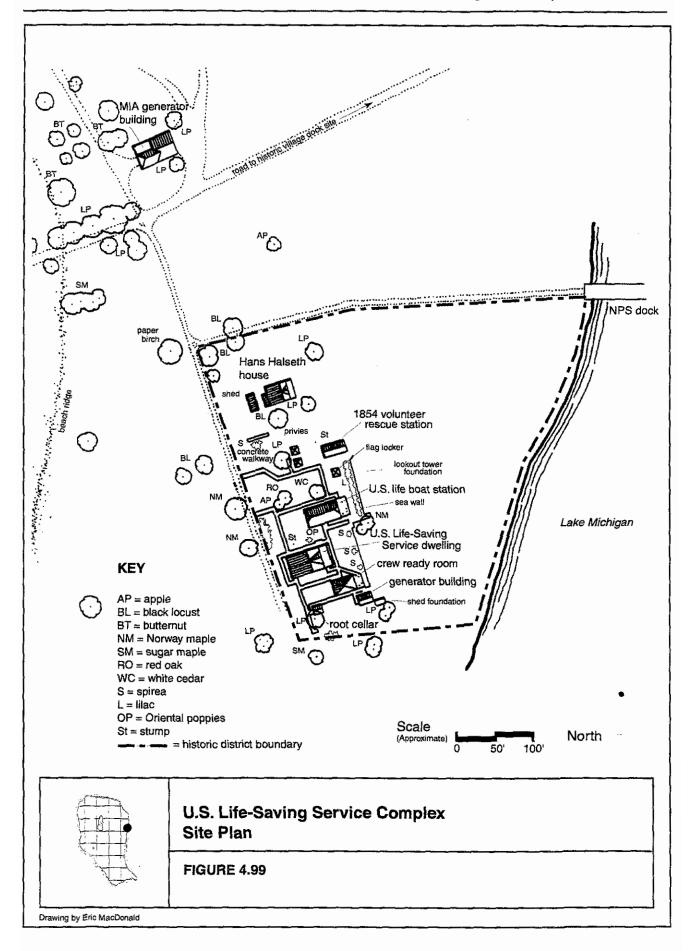


Figure 4.100. Hans Halseth House, U.S. Life Saving Service station, 1996. This simple, vernacular house is representative of the modest dwellings that USLSS crew members constructed for themselves and their families. Like other small structures at North Manitou Village, these houses tended to be highly mobile landscape features.

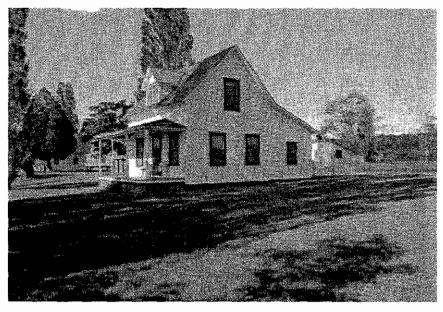
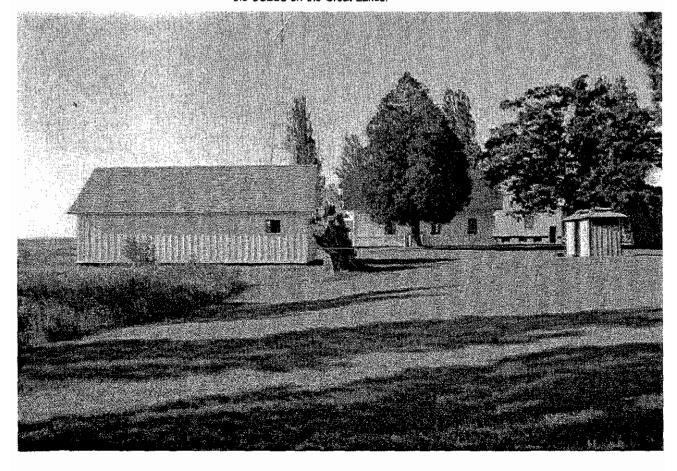


Figure 4.101. 1854 Volunteer Rescue Station beach cart house, north elevation, 1996. This structure dates from the founding of the North Manitou Island volunteer rescue station in 1854. The design of the beach cart house appears to be based on standard plans developed for a series of 28 stations established by the U.S. Secretary of the Treasury under a special 1854 appropriation. It is the oldest structure associated with the USLSS on the Great Lakes.



be the only Volunteer Rescue Station remaining in the nation that dates from the 1854 appropriation that established such stations. The National Park Service has restored the structure to its original design.

U. S. Life Boat Station

This structure was constructed by the North Manitou Island crew in 1877, using plans designed by Francis W. Chandler in 1876. The structure is an open, one-story boat house with a clipped gable roof featuring decorative brackets and barge boards. The building was later renovated by the Manitou Island Association, which removed the boat door and added a new door and new windows, including a large picture window in place of the former boat door. The MIA also removed a lookout tower, which originally had surmounted the roof of the building.

U. S. Life-Saving Service Dwelling

This structure was constructed in 1887, and is based on a plan believed to be unique in the nation. The original design may be the work of Albert B. Bibb, who designed a prototypical station for the U. S. Life-Saving Service at Marquette, Michigan. The two-story structure is roughly square in overall plan, with a steep gabled roof and a large, central cross gable (figure 4.102). The U. S. Coast Guard remodeled the dwelling in 1932, and the Manitou Island Association further altered the building during the 1940s and 1950s to serve as quarters for its employees, and as a lodge for its guests.

Crew Ready Room

Located a few feet southeast of the U. S. Life-Saving Service Dwelling, this building was constructed in 1895 to function as a supply building. The small, hip-roofed structure later was adapted for use as a place where on-duty crewmembers could wait until called into action for a drill or an emergency. In the 1940s the Manitou Island



Figure 4.102. U.S. Life Saving Service dwelling and large lilac shrub, 1996. The largest building in the North Manitou USLSS complex, the dwelling was constructed in 1887, and subsequently remodeled by the U.S. Coast Guard during the early 1930s. After a fire destroyed the Manitou Island Association lodge in 1953, the MIA rehabilitated the former USLSS dwelling to house groups of sportsmen who traveled to the island to hunt and fish.

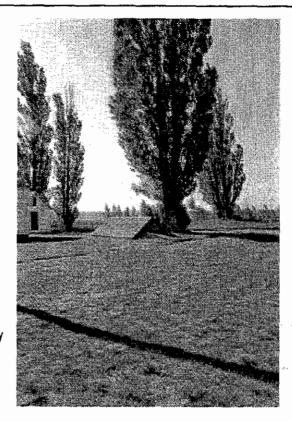


Figure 4.103. Root cellar and Lombardy poplar trees, 1996. Crew members used this root cellar to store fruits, vegetables, and other foods purchased from island farmers.

Association renovated the interior for use as living quarters. The National Park Service has partially restored the facade of the structure, and has adapted the building for use as staff housing.

Generator Building

Constructed in 1914-1016, the Generator Building is a nondescript, single-story, gable-roofed shed.

Root Cellar

Constructed in 1899 by the life-saving station crew, the root cellar has field stone and mortar walls and a gable roof clad with wood shingles (figure 4.103). The root cellar stored carrots, onions, cabbages, and other food items that were purchased from island farmers.

Cottage Row

History

Cottage Row was a real estate development initiated by Chicago residents Frederick H. Trude and George W. Blossom, in cooperation with Blossom's father-in-law, Silas Boardman. In 1894, Trude and Blossom paid Boardman \$500 for a parcel of land located southwest of the North Manitou Life-Saving Station. A covenant attached to the deed stipulated that the parcel was to be divided into ten east-fronting lots measuring 102' wide by 300' deep. Deed restrictions on the lots permitted the construction of only cottages and outbuildings on the lots. A significant portion of the parcel was reserved for use as a private park, and terms of the covenant allowed



Figure 4.104. Cottage Row boardwalk, ca. 1900.



Figure 4.105. Women pose on the front porch of the hotel at the northern end of Cottage Row, ca. 1900.

for the development of private roadways, the use of Boardman's pier on Lake Michigan, and access to Lake Manitou. Common infrastructure included roadways, boardwalks, and gas lights (figure 1.104). A large house located just beyond the northern end of the development was adapted to serve as a communal dining room (figure 4.105). It was later acquired by the Newhall family and used as a hotel. Another cottage, a large shingle-style structure built for Mrs. William Shepard and her daughter Katherine, later functioned as a hotel. According to Josephine Hollister, who was a descendant of one of the original Cottage Row property owners, the Trudes and Blossoms planned to sell the lots to personal acquaintances and friends. In effect, the Trudes and Blossoms aimed to create a private, exclusive resort community on the island. Many families who purchased lots in Cottage Row later became related through marriage. 205

²⁰⁴ Leelanau Deeds, Liber 21, 326-328.

²⁰⁵ Hollister, "The Summer Resort."



Figure 4.106. Members of the 1900 Cottage Row resort colony on North Manitou Island pose in front of the island hotel.

The Cottage Row summer resort colony constituted an important faction of the North Manitou Island community for more than fifty years (figure 4.106). The colony was particularly important because it provided seasonal employment for year-round island residents. In particular, the wives and children of North Manitou farmers and U. S. Life-Saving Service crewmen found jobs as servants in the privately-owned summer homes of Cottage Row, in the communal dining room, and at hotel operated by Katie Shepard (figure 4.107). For the island's year-round residents, the Cottage Row colony represented a significant source of supplemental cash income. Although some of the cottage owners maintained small gardens, the hotel and summer visitors also provided a much-needed local market for fresh vegetables, fruits, meats, and dairy products.

William Angell began purchasing Cottage Row properties in 1926. During the remainder of the 1920s, and continuing through the 1940s, several Cottage Row houses were occupied by shareholders of the Manitou Island Association and their associates, including Frank Reed, Roger Sherman, and George McConnell. The hotel and communal dining room at the northern end of Cottage Row served as the MIA lodge, where guests of the association's members were housed. Many of the cottages, however, apparently fell into disuse around the time that the Angell Foundation assumed control of the MIA during the early 1950s. The MIA lodge was destroyed by fire in 1953, and all but one of the cottages have been abandoned neglected since the MIA ceased its operations on the island in 1979. Descendants of the Howard Foote family—one of the original members of the Cottage Row summer colony—own the only cottage that is currently maintained and occupied.



Figure 4.107. The Cottage Row resort colony's "Culinary Dept.," 1900. Year-round island residents took jobs cooking, cleaning, and doing other domestic chores for Cottage Row residents. Given the island's remote, isolated economy, the cottage dwellers and hotels presented residents with rare opportunities for wage labor.

Landscape Setting

The Cottage Row district is a linear cluster of small, wood-frame houses and other landscape elements situated along the crest of the beach ridge that overlooks the North Manitou Life-saving Service complex (figure 4.109). ²⁰⁶ The buildings are oriented eastward to take advantage of off-shore breezes, as well as superb views of the Manitou Passage and the Michigan mainland (figure 4.108). From this prime vantage point, the summer residents could monitor activities of the life-saving service station, as well as steamship traffic through the passage. A board walk, shaded by sugar maple and Norway maple trees, once extended along this area. Parallel rows of small field stones, which may have been part of the boardwalk construction, are visible on the ground surface at several locations.

Individual Properties—History and Associated Cultural Resources

Lot No. 1, Katie Shepard Hotel, "The Beeches"

The large, one-and-a-half-story, shingle-style house was constructed in 1895 or 1896 for Mrs. William Shepard and her daughter Katherine, who was popularly known on the island as "Miss Katie." The house was allegedly designed in the style of the Shepards' residence in New Orleans (figures 4.110-112). A detached kitchen and dining room was located behind the house. Miss Katie is believed to have opened the house as a hotel known as "The Beeches" around the time that the Newhall family commenced logging on its North Manitou lands, ca. 1908. At that time, the Newhalls discontinued meal service at the communal dining hall located at the northern end of Cottage Row. Thereafter, residents took their meals at Katie 1

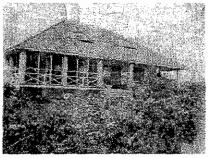
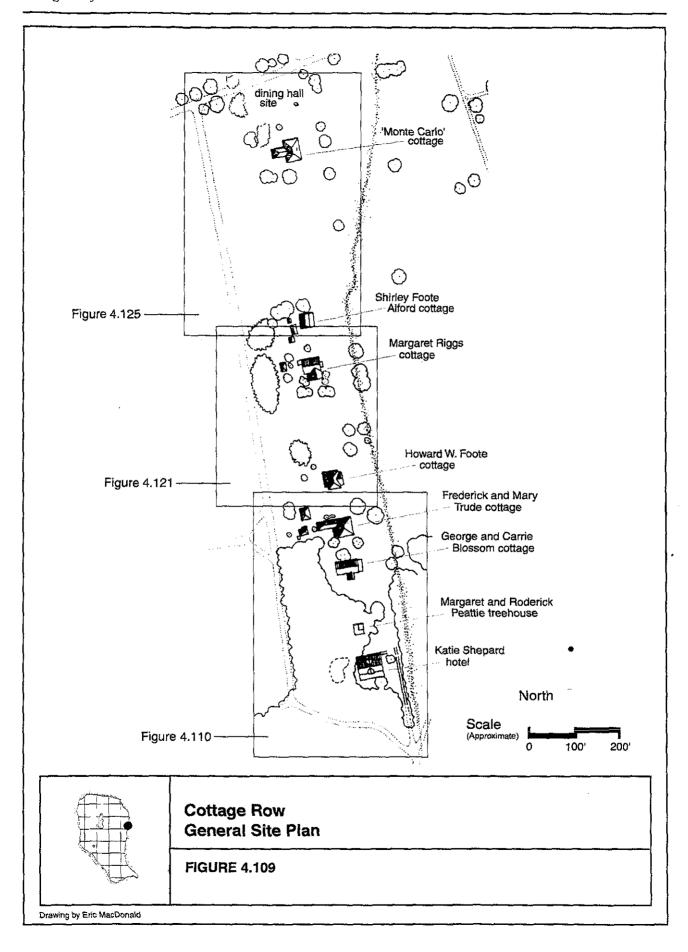
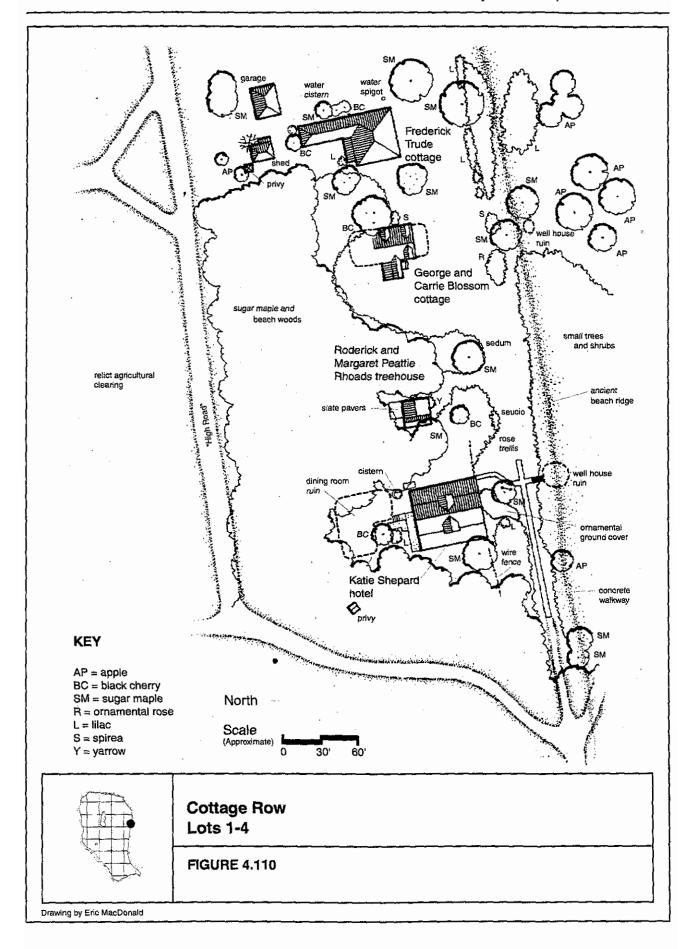


Figure 4.08. The second Howard Foote cottage, viewed from below the beach ridge, ca. 1901. The configuration of the Cottage Row parcels and accompanying deed restrictions ensured that each property owner would have an unobstructed view of the beach and the Manitou Passage.

²⁰⁶ The "Monte Carlo" cottage and the site of the former dining hall/MIA lodge, which are located just beyond the northernmost Cottage Row lot, are considered to be part of the proposed district because these properties are continuous with the other cottages in terms of proximity, design, historical associations, and general character.





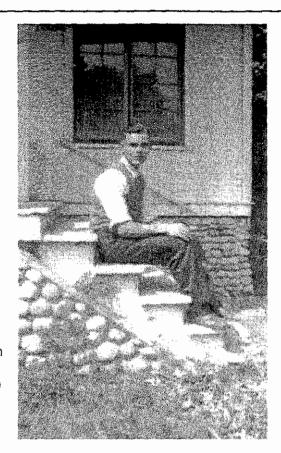


Figure 4.111. Chet Maleski on the porch of Miss Katie Shepard's hotel, ca. 1925. In addition to providing wage jobs, North Manitou's summer residents and hotels gave the Maleski family with an important market for fresh produce.

Shepard's dining room. Shepard continued to operate the hotel and dining room until poor health forced her to discontinue the business sometime in the early 1930s.

After Katie Shepard's death, ownership of the property passed to her niece, Edna Shepard Dean. Jean Lundquist recalled that for several summers during the late 1930s and 1940s the house was rented by "Captain and Mrs. Saxton." Captain Saxton apparently was a veteran of the Spanish American War, and often entertained the Londergans and other Cottage Row residents with stories. Continental Motors Corporation purchased the property from Dean sometime around 1950, and the Angell Foundation acquired the lot and buildings from the Teledyne Corporation (successor to Continental Motors Corporation) in 1969.

Although currently in urgent need of repair, the hotel remains in sound structural condition. The dining room appeared to be in stable structural condition in 1979 when Shunichi Hagiwara inventoried the site. The building had a front porch that was entirely screened by wooden lattice, and covered by a shingle-clad gable containing a single square-shaped window. Subsequent neglect has reduced the former dining room to a heap of rubble and wooden debris. Cultural landscape features include a concrete terrace and a ruined water cistern located behind the hotel, a concrete walkway and a metal rose trellis in front of the hotel, and a stairway that leads down the slope of the bluff to a ruined gazebo/well house. Orna-

Lundquist, interview.
 Fritz, "History Data Report," 20;
 Hollister, "The Summer Resort."



mental vegetation includes a large lilac shrub, and an ornamental ground cover in front of the hotel.

Lot No. 2

In 1895 or 1896 a solid-looking shingle-style cottage was constructed in Lot #2 by a couple known as "Mr. and Mrs. Hewitt" (figure 4.113). Shirley Foote Alford described the Hewitts' Cottage Row house, furnished in "burlap and calico," as "the prettiest [cottage] of all."209 A few years later the Hewitts, who were immigrants from England, sold the cottage to Dr. John Edwin and Louise Rhoades. In a wooded area adjacent to the cottage, the Rhoades built a small play house for their daughter, Margaret. Shortly after Margaret married Roderick Peattie, a lower floor was added to the play house, transforming it into a small, two-story, private cottage for Margaret and Roderick called "the treehouse." In 1927, soon after inheriting her parent's cottage, Margaret Peattie sold the property to William Angell. Jean Lundquist recalled that sometime during 1937-1950s the treehouse was occupied by an American Indian man named "Raphael." 210 The cottage eventually fell into disuse, and was torn down by the Manitou Island Association. However, Margaret and Roderick Peattie's "treehouse" remains standing on the site. The structure was intact when it was inventoried in 1979 by Shunichi Hagiwara, but it is now severely deteriorated and in urgent need of stabilization (figure 4.114).²¹¹ The treehouse is completely surrounded by trees and dense herbaceous

Figure 4.112. Katie Shepard hotel, 1996. One of two resort hotels that operated on the island, "The Beeches" began as the private summer home of Mrs. William Shepard and her daughter, Katherine.

²⁰⁹ Shirley Foote Alford, untitled manuscript ca. 1920s, typed by Josephine Hollister, n.d. (Betty Kramer Collection, Leelanau County Historical Museum, Leland, Mich.).

²¹⁰ Lundquist, interview.

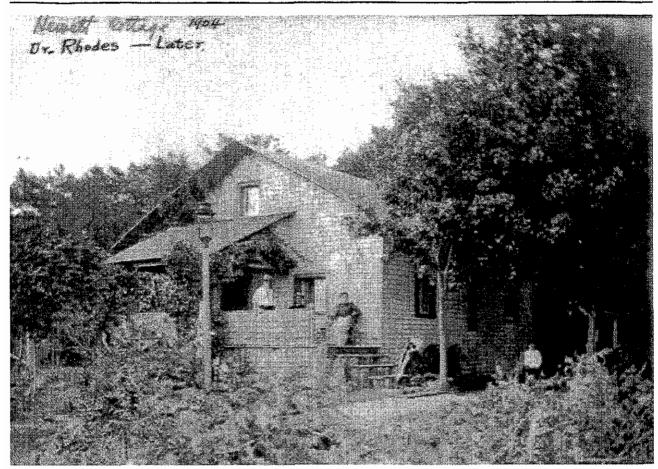
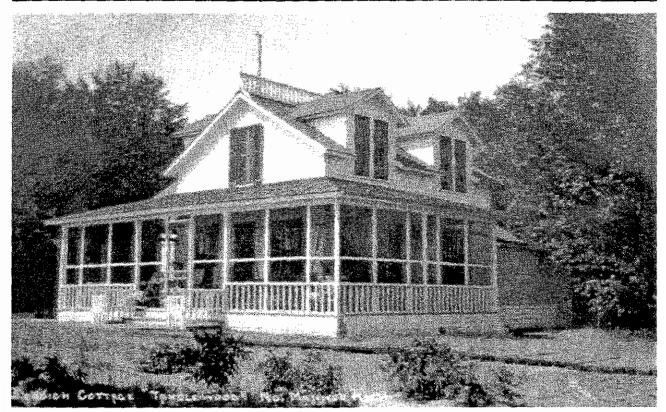


Figure 4.113. Hewitt cottage, 1904.



Figure 4.114. Margaret and Roderick Peattie treehouse, 1996. The two-story cottage built for Margaret and Roderick Peattie is one of the most curious structures on North Manitou Island. Unfortunately, the treehouse is deteriorating rapidly due to several decades of deferred maintenance.



and woody undergrowth. A small slate patio remains along the western side of the structure, as does a clump of yarrow planted along the eastern foundation.

Lot No. 3, George and Carrie Blossom Cottage

Originally located in the "farmhouse yard" of Silas Boardman's farm, George and Carrie Blossom moved this small house to their Cottage Row lot in 1894. The one-and-a-half-story front-gable-and-ell structure had a light wood frame, gabled dormers, and a full verandah across the front (east) elevation (figure 4.115). The Blossoms later sold the cottage to the Burdick family, who called it "Tanglewood." The house was occupied by Frank Reed when the Manitou Island Syndicate began consolidating its island property holdings during the late 1910s and early 1920s. In 1937, William Angell purchased the property from Vincent Reed, who was residing in Wynnewood, Pennsylvania.²¹²

Although its front porch was missing, the house appeared to be structurally sound when Shunichi Hagiwara surveyed Cottage Row in 1979. 213 After decades of neglect, however, the Blossom cottage is now a ruin (figure 4.116). The structure is becoming engulfed in vegetation. A small cluster of bridal wreath spirea shrubs is located along the north elevation of the house, and another cluster of spirea is located in front of the house, along the edge of the bluff. Nearby, is a large patch of ornamental roses. A well house ruin is located at the base of the bluff.

Figure 4.115. George and Carrie Blossom cottage, ca. 1900. The Blossom cottage is historically significant as the summer residence of one of Cottage Row's founding families, and as the first cottage to occupy a site in the private, quasi-communal resort development. Unfortunately, the severely dilapidated cottage slowly is disappearing from the Cottage Row landscape.

²¹¹ Shunichi Hagiwara, "Building-Structure Inventory."

²¹² Fritz, "History Data report," 20; Hollister, "The Summer Resort."

²¹³ Shunichi Hagiwara, "Building-Structure Inventory."

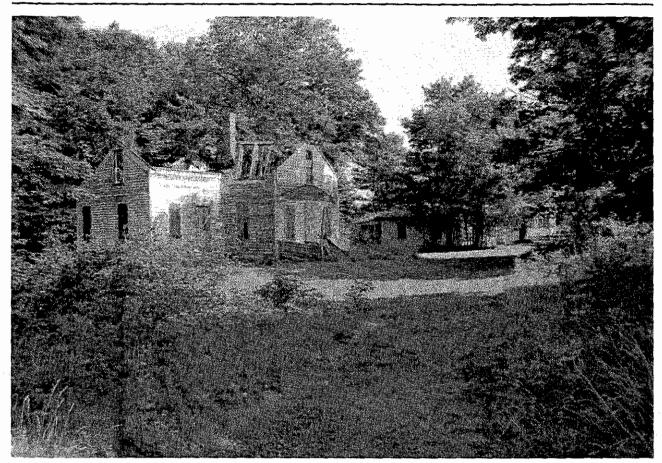


Figure 4.116. George and Carrie
Blossom cottage ruin, 1996. The mown
pathway approximates the route of the
former Cottage Row boardwalk, which
followed the crest of the beach ridge.
Although the wooden walkway has long
since disappeared, large maple trees,
ornamental shrubs, and rows of
fieldstones delineate its former location
and alignment.

Lot No. 4, Frederick H. and Mary Trude Cottage

The cottage on Lot No. 4 was built by Nicholas Feilen in 1894 for Frederick H. and Mary Trude, one of the developers of the Cottage Row resort colony (figure 4.117).²¹⁴ The Trude house is one of three Cottage Row houses based on a vernacular "dog-trot" architectural plan—that is, rooms are arranged along each side of a covered breezeway, with the doors opening into the central passage. The origins of the dog-trot plan are traced to the gulf coast area of Mississippi, where it later evolved into a bungalow house type, with a breezeway that was enclosed to form a central room, one or two fireplaces, and a gallery or verandah that extended across the front of the house (figure 4.118). The verandah was positioned to capture on-shore/off-shore breezes to cool the house naturally.²¹⁵

How the dog-trot bungalow house type was transported to a remote corner of northern Michigan, far removed from coastal Mississippi, is a mystery that has prompted considerable speculation among architectural historians. Much of the speculation revolves around George Blossom's connection with Chicago architects Louis Sullivan and Wright. Sometime between 1892 and 1895, George Blossom commissioned Frank Lloyd Wright to design a summer house for him and his wife on North Manitou Island.²¹⁶ Blossom may have become acquainted with Wright while the architect was working in the office of Louis Sullivan, since Sullivan had recently

<sup>Alford, untitled manuscript.
William Allin Storrer, "What's in a Plan? The Blossom/Fiske Cottage," FLIW Update 9(1): 1-2, (June 1989).
Inland Architect and News Record 23(2), n.p. (March 1894). The notice reads: "Architect FL. Wright:....Also for George W. Blossom, a summer cottage, to be built at Manitou."</sup>

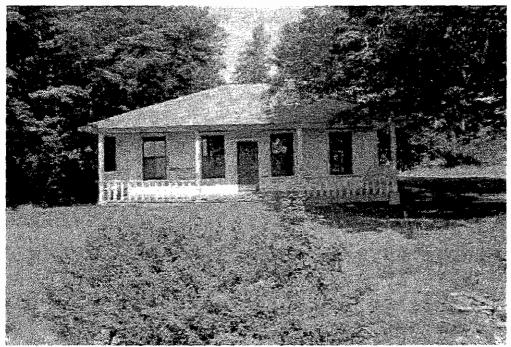
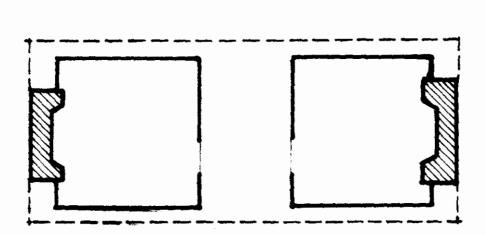


Figure 4.117. Frederick H. and Mary Trude cottage, front (eastern) elevation, 1996. The trude cottage is one of three Cottage Row houses that appear to be influenced by vernacular dog-trot bungalows, a common house type in Gulf Coast resort communities. The broad front gallery of the Trude cottage takes advantage of the building's orientation toward the Manitou Passage.



Source: Derived from Allen G. Noble, Wood, Brick, and Stone: The North American Settlement Landscape (Amherst, Mass.: University of Massachusetts Press, 1984) Fig. 10-37.

Typical Dog-trot House Floor Plan

FIGURE 4.118

Drawing by Eric MacDonald and Katie Franks

designed a new house for George and Carrie Blossom in Chicago. While no records of Wright's contract with Blossom have been located, it is possible that the famed architect produced a design based on the dog-trot bungalow plan, a house type with which he may have been familiar through his work in Sullivan's office. Sullivan was familiar with the dog-trot house type, as demonstrated by cottage designs he prepared for himself and others at Ocean Springs, Mississippi, during the early 1890s. Architectural historian Paul Sprague has questioned Wright's authorship of the Trude cottage design, but it is possible that the Trudes based the design of their cottage on plans that Wright had developed for their close personal friends, the Blossoms. Yet another possibility is that the cottage now known as "Monte Carlo," which may have been built by the Blossoms, is the design produced by Wright. The sense of proportion and scale reflected in the Monte Carlo cottage plan seems to represent a more refined architectural sensibility.217

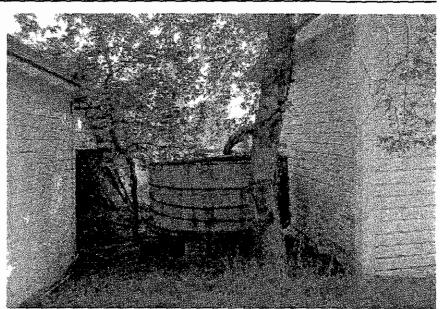
The provenance of the Trude cottage remains unclear. Josephine Hollister notes that it, as well as the neighboring Howard Foote cottage, was constructed of materials reused from dismantled exhibition booths of the Manufacturers' Building at the 1893 Chicago World's Columbian Exposition. 218 Both cottages are lightwood frame buildings sheathed with clapboard siding, and both have similar dog-trot floor plans: a full-width verandah across the eastern elevation connected to a central living room flanked by two bedrooms on either side. The Trude cottage, like all of the other Cottage Row houses, originally did not have a dining room or kitchen, as residents took meals at the communal dining hall located at the northern end of the row. As with the other Cottage Row houses, a kitchen was added to the Trude cottage after the closing of Katie Shepard's dining room during the 1930s (figure 4.119). The addition also included an indoor bathroom, although the cottage remained without electrical service.²¹⁹ Unlike the other two North

Figure 4.119. Frederick H. and Mary Trude cottage, rear (western) elevation, 1996. Because residents and quests took meals at the communal dining room located at the northern end of Cottage Row. individual cottages originally lacked kitchens. After the Cottage Row dining room closed around 1908, Katie Shepard opened her home as a hotel, and offered meals to summer residents in a detached dining pavilion. Rear kitchen ells later were added to several Cottage Row houses, including the cottage built by the Trudes. Most of the additions probably were constructed during the early 1930s, shortly after Katie Shepard closed her hotel and dining room.

²¹⁷ William Allin Storrer, What's in a Plan?," 1-2.

²¹⁸ Hollister, "The Summer Resort."

²¹⁹ Lundquist, interview.



Manitou dog-trot bungalows, the Trude cottage was not built on a raised foundation wall. Instead, the structure rests on a stone and concrete foundation that rises only a few inches above grade. The interior walls of the cottage were not plastered; rather, decorative moldings were added in the spaces between structural members, and all of the exposed wood surfaces were varnished.

A few years after building the cottage, the Trudes sold their Cottage Row property to George and Mary Fiske. The Fiskes also purchased Lot No. 8, and an additional parcel of island land, which they later exchanged for waterfront acreage on the eastern side of Lake Manitou. The Cottage Row property remained in the Fiske family until 1979.²²⁰

Located behind the Trude cottage are a water cistern, an automobile garage, a storage shed, and a privy (figure 4.120). Ornamental vegetation includes a lilac shrub located south of the house, and a cluster of lilacs growing in front of the house, at the edge of the bluff.

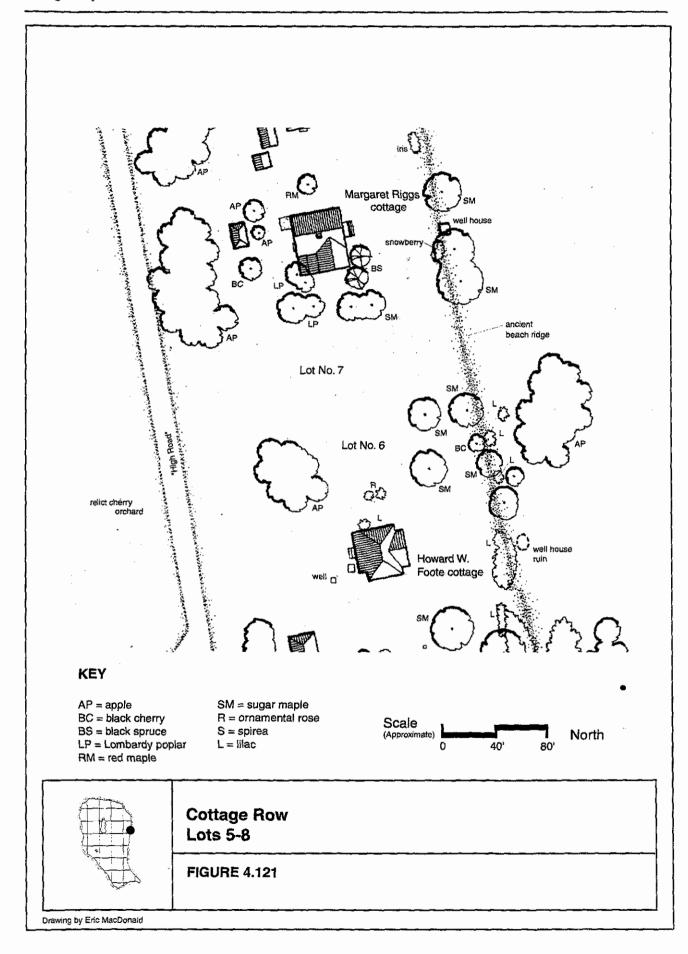
Lot No. 5, Howard W. Foote Cottage

The cottage on Lot No. 5 was built for the Howard W. Foote family during the summer of 1894 by two Chicago carpenters, one of whom was Nicholas Feilen, who later settled a homestead on North Manitou Island. The plan of the Foote cottage is similar to that of the Trude cottage (Figure 4.121). Unlike the other North Manitou dog-trot cottages, however, the Foote cottage has a gable-roofed porch that extends across only three-quarters of the width of the front elevation (figure 4.122).

In 1900, Foote sold the cottage to S. W. McMunn, the father of Mary McMunn Bournique. Later, the property was purchased by William Stark, a partner in the Stark Bros. Nursery Co. of Louisiana, Missouri. The cottage subsequently was purchased by Katie

Figure 4.120. Frederick H. and Mary Trude water cistern and outbuildings, 1996. The Trude cottage water cistern is an intact example of a once-common feature on North Manitou Island. Evidence of similar cisterns exists at several sites, including the Katie Shepard hotel, the Bournique summer residence, and the Mads and Gertrude Nerland / John and Ildri Anderson house.

²²⁰ Fritz, "History Data Report," 74; Hollister, "The Summer Resort."



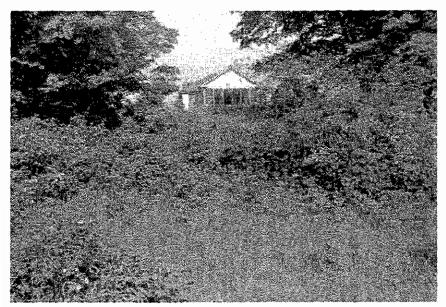


Figure 4.122. Howard W. Foote cottage, 1996. Like other Cottage Row houses, the Foote cottage originally fronted onto a boardwalk that extended along the edge of the beach ridge.

Shepard, who then sold it to William Angell in 1928. According to Jean Lundquist, Angell purchased the cottage for his wife, although she rarely, if ever, visited the island.²²¹ The cottage later was used by Avery Wing, who owned a 1/20th share of the Manitou Island Association from the late 1940s until the association was liquidated following National Park Service acquisition of the island. Wing claimed ownership of the Cottage Row lot, although he apparently never received the deed from Angell.²²² Ornamental vegetation includes a lilac shrub and a cultivated rose planted near the northern lot line. A cluster of apple trees is located northwest of the cottage. A cluster of lilacs and a ruinous well house is located below the house, at the base of the bluff.

Lot No. 6

Lot No. 6, one of the first Cottage Row parcels sold by Blossom and Trude, was purchased in November 1894 by John H. Keating (figure 4.21). During the following summer, Nicholas Feilen built a cottage on the lot for Keating, his wife Ellen, and their daughter Ethel. During the early 1940s the Keating cottage was relocated to a site north of the "Campbell" house. Lacking a stable foundation at its new site, the structure collapsed and was subsequently removed.²²³

Lot No. 7

No structure was built on Lot No. 7, which was owned by Cottage Row property owners S. W. McMunn, and subsequently, by Dr. John Rhoades. The Angell Foundation acquired the lot in 1958.

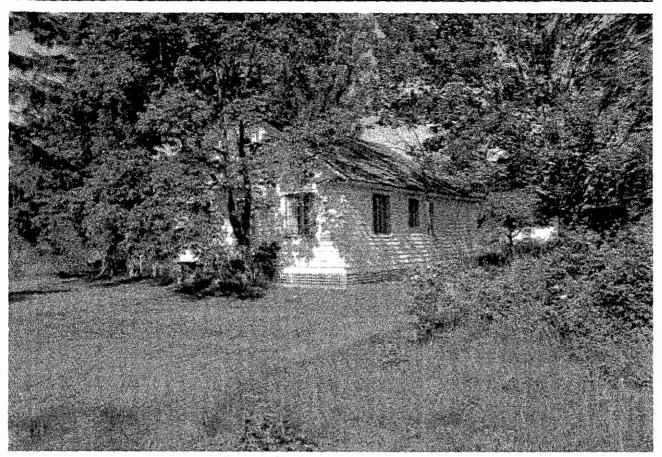
Lot No. 8, Margaret Riggs Cottage

The parcel initially was purchased by G. A. M. Liljencrantz. It subsequently was owned by George Fiske, who later sold the lot to Margaret Riggs, a frequent guest at Katie Shepard's hotel. In 1924, Nicholas Feilen constructed a cottage on the property for Riggs (figure 4.123). Margaret Londergan, who was William Angell's personal secretary,

²²¹ Lundquist, interview.

²²² Fritz, "History Data Report," 20, 74-75; Hollister, "The Summer Resort;" Memorandum, [W.] Craig Keith to [Board of Trustees, William R. Angell Foundation], 31 December 1976; Alford, untitled manuscript.

²²³ Alford, untitled manuscript.



²²⁴ Fritz, "History Data Report," 20, 75; Hollister, "The Summer Resort;" [W.] Craig Keith to [Board of Trustees, William R. Angell Foundation], 31 December 1976; Rusco, North Manitou Island, 14-15; Lundquist, interview.

225 The resemblance of the Riggs cottage floor plan to the room arrangement of the other North Manitou "dog-trot" cottages suggests that Felien may have been responsible for promulgating the dog-trot plan on the island. Feilen was brought to the island specifically to build cottages for Cottage Row's first residents. Perhaps Feilen came to the island after gaining first-hand experience of such architecture in the Gulf Coast region. Perhaps it was there that Feilen also observed the poteaux sur solle construction technique that he used at the Alvar and Mary Bournique residence.

Figure 4.123. Margaret Riggs cottage, 1996. The floor plan of the Riggs house resembles a modified version of the dog-trot-inspired plans of the Trude, Foote, and Monte Carlo cottages—a trait that may reflect the influence of its builder, Nicholas Fellen. Feilen also constructed the Alvar and Mary Bournique residence, another summer home with apparent ties to the vernacular architectural traditions of the Gulf Coast region. Perhaps Feilen was at least partly responsible for introducing southern vernacular architectural forms to this remote corner of the upper Midwest.

purchased Margaret Riggs' cottage in 1947. Londergan and her daughter, Jean, had spent summers on the island since 1937. Each summer, Londergan traveled to the island with Angell in order to assist him in the management of the MIA and other business matters. In 1956, Londergan agreed to sell the property to the Angell Foundation, however the sale was not completed until 1958. A garage and a privy were located behind the house. The house lacked an indoor bathroom until shortly before it was sold to the foundation.²²⁴

Although the exterior form of the Riggs cottage resembles a small, one-story, front-gable and-ell dwelling, its interior room arrangement mimics that of the Cottage Row dog-trot houses. ²²⁵ Instead of a full front verandah, however, the Riggs cottage has only a small, arch-roofed hood that projects over the stoop (figure 4.124). Ornamental vegetation includes two large spruce trees in front of the house, a clump of snowberry at the edge of the bluff, and a ruinous well house below. A cluster of fruit trees extends across the western portion of the lot.

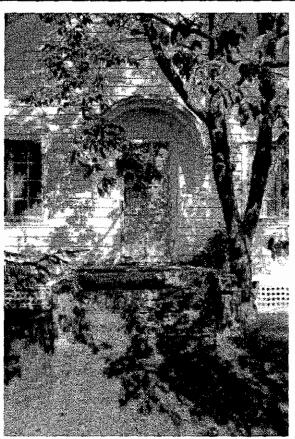


Figure 4.124. Margaret Riggs cottage, entrance detail, 1996. Although the interior room arrangement of the Riggs cottage is similar to that of the Trude, Foote, and Monte Carlo cottages, the exterior form of the house bears little resemblance to those earlier dwellings. The most obvious departures are the asymmetrical front elevation of the Riggs cottage, and the lack of a broad gallery, which has been replaced by a small covered stoop.

Lot No. 9, Shirley Foote Alford Cottage

Howard Foote built his second Cottage Row house on this lot in 1901. Following the death of his wife, ownership of the property passed to Foote's children. The house was destroyed by fire in 1935. In its place, Foote's daughter, Shirley Foote Alford, erected a small house purchased as a kit from Sears & Roebuck (Figure 4.125).²²⁶ The house and lot currently are owned and maintained by Alford's grand-children.

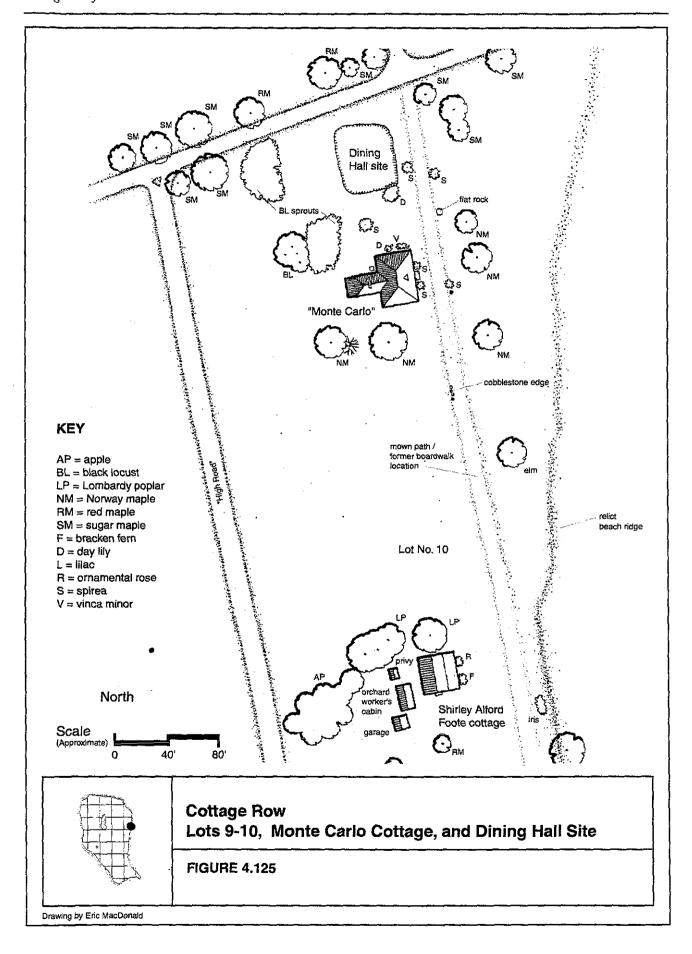
The Alford cottage is a small, one-story side-gabled structure with a full-width front verandah (figure 4.126). One of the cabins built by the MIA during the 1930s to house migrant orchard workers is located behind the Alford cottage (figure 4.127). Like the cottage, this structure is in excellent condition. A cluster of fruit trees is located at the rear of the lot, behind the cabin.

Lot No. 10

This lot was never built upon. Initially purchased by a man named Fox, William Angell bought the property from John N. Kail, who owned the lot in 1926. Lot No. 10 was Angell's first Cottage Row acquisition. During the 1930s and 1940s, Angell utilized the lot as a small alfalfa field, which was intended to entice deer to the area. Angell apparently took great pleasure in observing the deer that he helped establish on the island.²²⁷

²²⁶ Hollister, "Summer Resort;" Fritz, "History Data Report," 75. Fritz states that the original cottage burned in 1934.

²⁷ Fritz, "History Data Report," 20, 76; Lundquist, interview. Fritz states that the Monte Carlo cottage was erected on Lot No. 10. However, that cottage was built on an adjacent parcel north of Lot No. 10.



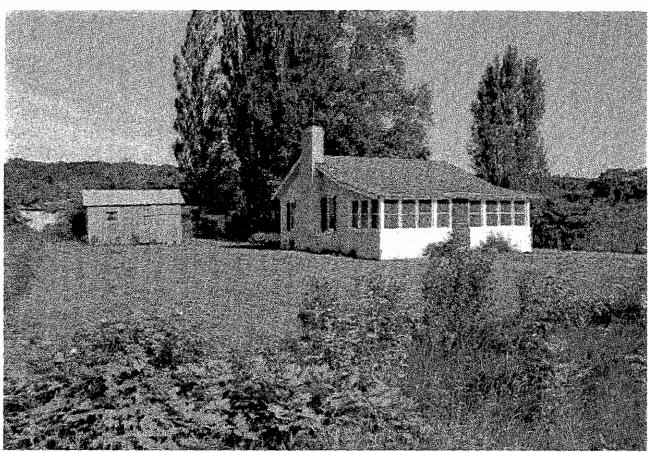


Figure 4.126. Shirley Foote Alford cottage and migrant orchard workers' cabin, 1996. A "mail-order" house, the Alford cottage represents a practical solution to the dilemma of constructing a building in a remote setting that, during the late 1930s, lacked both modern materials and a skilled labor force.

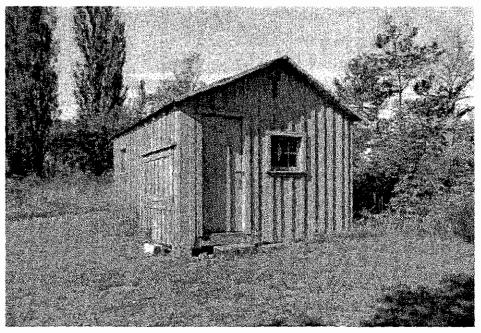


Figure 4.127. Migrant orchard workers' cabin, 1996. The design of this former orchard workers' cabin, which is located behind the Alford cottages, is nearly identical to that of the three structures standing north of the village. This cabin, however, is in superior physical condition.

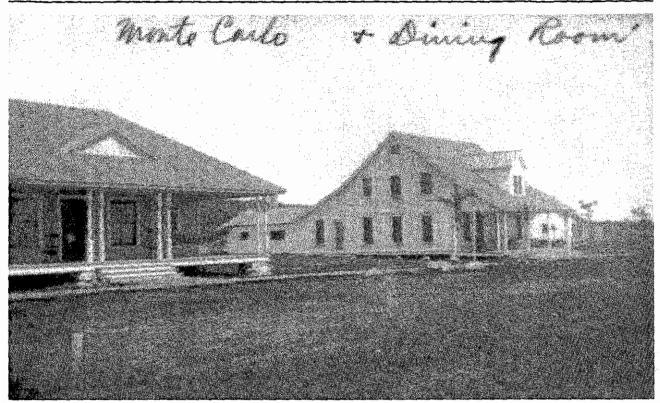


Figure 4.128. Monte Carlo cottage and the Cottage Row hotel and dining room, ca. 1900. The Monte Carlo is one of three Cottage Row houses that may be based on a design prepared by Frank Lloyd Wright for George and Carrie Blossom.

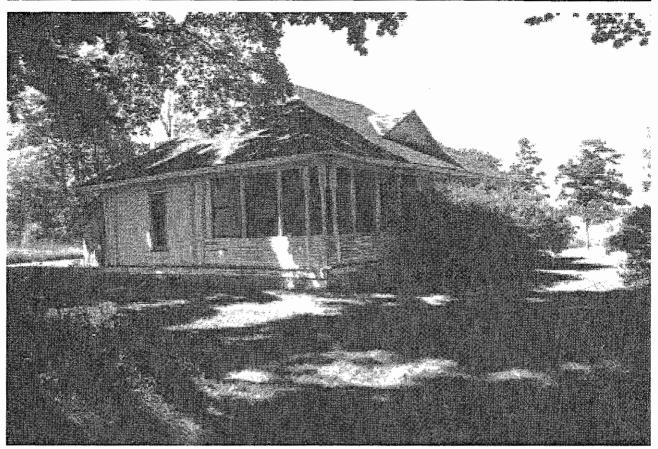
"Monte Carlo" Cottage

The cottage known as "Monte Carlo" was constructed "between the time the summer people left in 1893 and returned in 1894" by "relatives of the Boardman family." It is situated on a three-acre parcel of property located directly north of the Cottage Row plat. The Monte Carlo cottage shared this parcel with the former home of U. S. Life-Saving Service keeper Daniel Buss, which Silas Boardman moved from its original location near the life-saving station (figure 4.128). The Buss house was remodeled to serve as a communal dining facility for Cottage Row property owners. Dining service for Cottage Row residents apparently was discontinued during the Newhall era, when the building functioned as a hotel.

The Monte Carlo is the third dog-trot bungalow cottage on North Manitou Island. It predates the other Cottage Row houses, and may have been built by George and Carrie Blossom. Its architectural design, as well as the possibility that the house was constructed by the Blossoms, suggests that it may be the cottage designed by Frank Lloyd Wright. The Foote family stayed at the "Monte Carlo" while carpenters completed their cottage in 1894. The design of both the Foote and Trude cottages may be based on that of the Monte Carlo. Regardless of their provenance, the Trude, Foote, and Monte Carlo cottages represent a distinctive house type that is exceedingly rare in the northern Great Lakes region.

A 1919 survey of the North Manitou Village area indicates that the dining hall and Monte Carlo parcel were owned then by M. T. Bacon. The property eventually was acquired by William Angell, who occupied the Monte Carlo during his visits to the island. The dining

²²⁸ Alford, untitled manuscript.



hall/hotel was converted into a lodge for guests of the Manitou Island Association. The structure was destroyed by fire in 1953.

The Monte Carlo cottage remains in stable structural condition (figure 4.129). Ornamental vegetation at the site includes several Norway maple trees scattered around the house, two bridal wreath spirea shrubs flanking the front entrance, and a third spirea shrub across the walkway that runs along the crest of the beach ridge. North of the cottage, the site of the former MIA lodge is marked by a slight earthen depression and a single spirea shrub growing near the walkway.

Contributing Landscape Components

concrete walkways
Norway maple trees

boardwalk field stones sugar maple trees

spirea shrubs

rose shrubs

Figure 4.129. Monte Carlo cottage, 1996. William Angell used the Monte Carlo cottage as his island residence.

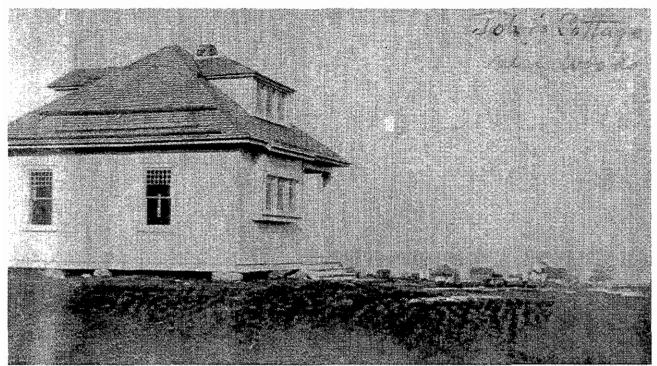


Figure 4.130. The cottage built for John Newhall near the edge of the North Manitou Village clearing, ca. 1900. The cottage served as Newhall's residence while he was on the island managing the family's extensive agricultural and resort business.

John Newhall Cottage

History

In 1902, shortly after he and his father acquired large tracts of North Manitou Island, Benjamin Newhall constructed two houses north of the east-west dock road leading from the North Manitou dock. The smaller of the two, located near the western edge of the village clearing, was occupied by John Newhall, who managed the family's various island business ventures (figure 4.130). By 1919, N. E. Degan had purchased the 250' by 700' parcel containing the two houses. The Degans are credited with introducing Lombardy poplars to the North Manitou Island landscape. According to island lore, Mrs. Degan allegedly brought several trees from France to her island property. The offspring of these trees apparently were planted elsewhere in the village area, where they continue to be prominent features of the landscape.

The Degans and their children used both houses as summer cottages until 1946, when they sold their property to the Manitou Island Association. The southern end of the landing strip developed by the MIA later traversed the property, passing between the two houses. The MIA utilized the easternmost house, the largest of the two, as a school until it was destroyed by fire in 1956. That same year, Jurica and Day, owners of the Lake Michigan Hardwoods Company, began utilizing the John Newhall cottage as the headquarters for their timber cutting operations on the island. The cottage may have continued to serve this function until the MIA's last contract with the Lake Michigan Hardwoods Company expired in the late 1970s.²²⁹

²⁹ Fritz, "History Data Report," 76; Rusco, North Maniton Island, 14; Hollister, "The Summer Resort;" W. O. Greene, surveyor, "Subdivisions of Section 34, T32N R14W, N: Manitou Id.," 3 October 1919, MIA Collection, Sleeping Bear Dunes National Lakeshore, Empire, Mich.

Location

The surviving Newhall cottage is located directly west of the North Manitou Village along the road that leads from the village dock to Lake Manitou. The cottage is situated north of the road on land that slopes gently upward toward the edge of the woods to the west. The site of the other cottage is marked by a dense cluster of Lombardy poplar trees located several yards east of the remaining cottage (figure 4.131).

Landscape Setting

Located near the western edge of the huge clearing formerly devoted to orchards and agricultural fields, the John Newhall cottage is in a relatively open setting that offers sweeping views of the abandoned MIA landing strip, North Manitou Village, and Lake Michigan (figures 4.132 and 4.133). The road in front of the cottage is lined with large, more-or-less evenly-spaced sugar maple trees. Directly west of the cottage is a small square-plan, hip-roofed structure that was a wash house. A concrete walkway leads from the backdoor to this small outbuilding. The wash house is surrounded on the south and



Figure 4.131. Lombardy poplar trees at the site of the former Newhall cottage, 1996. The Degan family, subsequent owners of the two Newhall cottages, allegedly planted the first Lombardy poplar trees on North Manitou Island at this site. Lombardy poplars were later planted at other locations in the village vicinity, where they remain prominent landmarks. In some places the original plantings have expanded to become dense, monotypic groves.

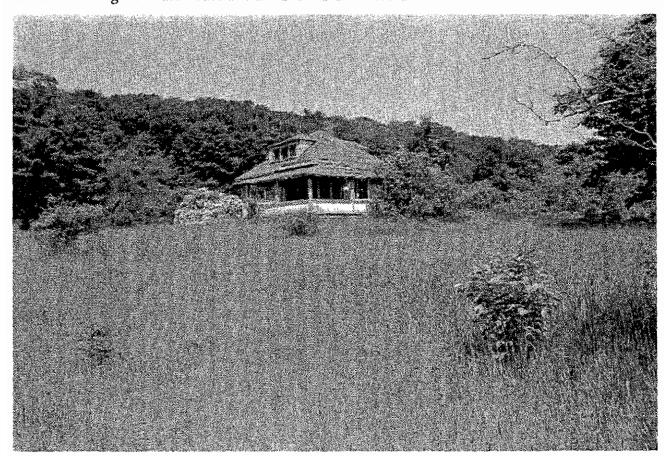
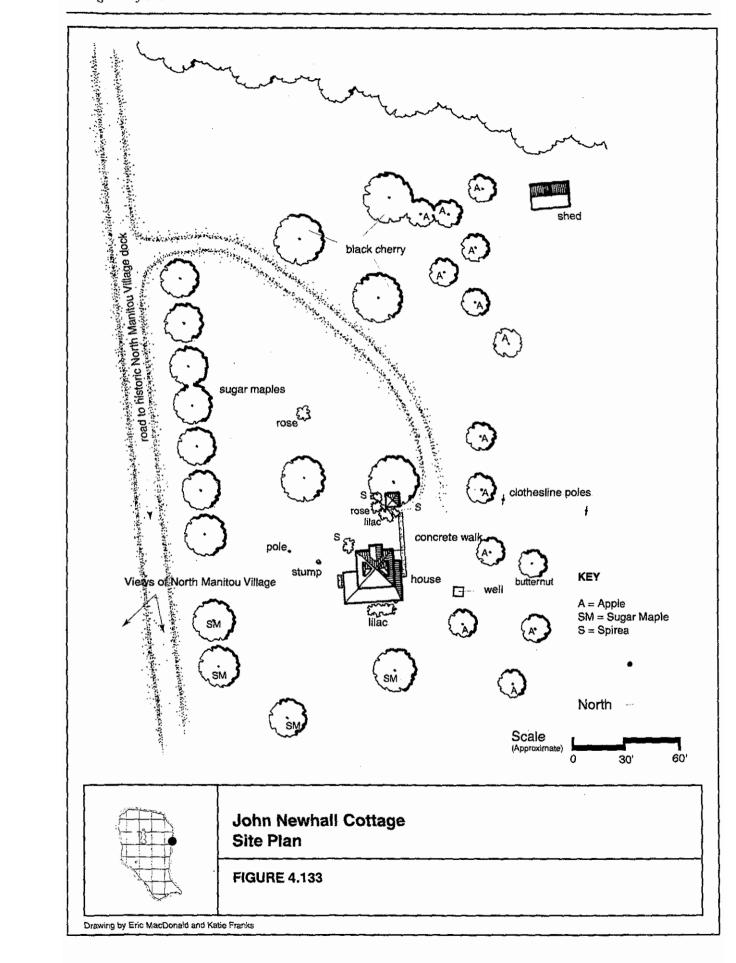


Figure 4.132. John Newhall cottage, 1996. Removed from the other residences of North Manitou Village, the former John Newhall cottage occupies a site within the large agricultural clearing that surrounds the village, perhaps reflecting the initial agricultural focus of the Newhall's North Manitou business enterprise. The site offers a commanding view of the village, the Manitou Passage, and the Michigan mainland, which forms the eastern horizon.





east by ornamental shrubs, including a lilac, pink spirea, and rose. It is shaded by a large black cherry tree located west of the wash house. Other ornamental vegetation includes a large clump of lilacs located along the eastern side of the house, and a large spirea shrub at the southwestern corner of the front porch. A butternut tree and several apple trees still are found behind the house to the north. Another cluster of apple trees is situated west of the house, in front (south) of the large garage/shed. Located farther out to the northwest are poles that appear to have been set up for clothes lines.

Buildings and Structures

The John Newhall cottage is a one-and-a-half-story, hip-roofed dwelling with hip-roofed dormers (figure 4.134). Roughly square in plan, the structure rests on a stone foundation. A porch extends along much of the southern and eastern elevations. The house is currently in ruinous condition. There is a large lilac shrub on the eastern side of the house, and a large bridal wreath spirea at the southwestern corner. A few feet west of the house is a small, one-story, hip-roofed wash house with two doors that face east. A concrete walkway leads from the rear door of the cottage to the wash house. The wash house is surrounded on the southern and eastern sides by ornamental shrubs: pink spirea, two lilacs, and a rose. Several yards northwest of the cottage is a large one-story, gable-front shed. It is clad with asphalt sheathing and wooden battens. Several apple trees are clustered north of the cottage, as well as

Figure 4.134. John Newhall cottage, western elevation, 1996.

northwest of the cottage in front of the gable-roofed shed. Large sugar maple trees line the roadway in front of the house, and also are found in the yard, along with a rose, a stump, and an old utility pole.

Contributing Landscape Components

clothesline poles

butternut tree

utility poles

apple trees

concrete walkway

lilac shrubs

septic tank (?)

spirea shrubs

stump

rose shrubs

sugar maple trees

Contributing Structures

Cottage

Structure Number: 53122870

Dimensions: 35'-7" x 34'-8"

Foundation: Stone

Walls: wood clapboard

Roof: hip, asphalt shingles

Wash House

Structure Number: 53122871

Dimensions: 9'-4" x 9'-4"

Foundation: None

Walls: wood drop lap siding

Roof: hip

Garage / shed

Structure Number: 53122872

Dimensions: 16'-6" x 29'-0"

Foundation: none

Walls: asphalt roll siding with

wood battens

Roof: asphalt roll

Chapter Five

National Register of Historic Places Eligibility Evaluations



Cultural landscapes represent a complex set of challenges and opportunities for historic preservationists and cultural resource managers. A number of problems stem from one very basic attribute: landscapes are generally much bigger, more complex, and more dynamic than any single building or structure. Both the spatial and temporal boundaries of a landscape are frequently indistinct. Decisions about where a particular landscape begins or ends, or when a landscape's history begins or ends, are inescapably arbitrary judgments. This does not mean that landscape are wholly unknowable, however. One concept that is often evoked in describing cultural landscapes is that of the palimpsest. Borrowed from the juridical tradition of ancient Rome, the term originally referred to a document that had been created, erased, reworked, erased again, and so forth, so that vestiges of all the previous versions remained visible, however faint. Likewise, cultural landscapes may be conceived as palimpsests consisting of layers of history that leave behind discernible, physical attributes that, together, may be understood and "read" like a document.

In addition to a tendency for spatial and temporal ambiguity, landscapes are dynamic resources that are constantly changing. Landscapes incorporate living, biotic systems that both embody and transform them to an extent not typical of architectural resources or other artifacts. Furthermore, because cultural landscapes often are the creations of many individuals over several generations, they incorporate successive layers of history and cultural meaning. Uncovering the ambiguous (and sometimes conflicting) material and emotional connections that people have with the land can be a

complicated task. Because they are less tangible than other types of artifacts, considerable effort is required to understand a cultural landscape, and any single perspective is almost always too narrow to provide a comprehensive assessment. Landscape simply encompasses more stuff—more tangible material, more associative qualities, more organic and physical processes, more time, more substance. The expansive scale of a cultural landscape must be accommodated in terms of both historical scholarship and interpretation, as well as resource stewardship.

In the United States, the National Park Service (NPS) has played a leading role in developing approaches to documenting and analyzing historic cultural landscapes. In particular, the National Register of Historic Places (NRHP) program has developed guidelines and methodologies for inventorying and evaluating several distinct types of cultural landscapes, including designed landscapes, rural landscapes, cemeteries, and mining properties, among others. In evaluating the historical significance of a cultural landscape, NPS resource managers and other historic preservation professionals throughout the country generally utilize the evaluation criteria of the National Register of Historic Places. The National Register is regarded as the nation's official list of historic properties that are worthy of preservation. National Register-listed properties may possess national-, state,- or local-level significance. However, all properties included in, or determined eligible for inclusion in the NRHP, are subject to a rigorous process of research, documentation, and evaluation.

The evaluation criteria utilized by the National Register of Historic Places represent a well-established, and widely-accepted conceptual framework for assessing the significance of historic sites and determining their worthiness for preservation treatments. With few exceptions, only properties that are at least fifty years old are considered potentially eligible for inclusion in the NRHP. A property's significance is conceived as a combination of its associative value(s) and historical integrity. Four NRHP criteria, summarized below, pertain to a property's associative aspects. These may be applicable at a number of levels, ranging from national to local history.

A property's associative values are weighed in relation to its historical context. The term "context," in this case, refers to the combination of a property's geographical location, area(s) of significance, and its period of significance. An "area of significance" is analagous to a general historical theme, such as "transportation" or "agriculture." The NRHP currently recognizes 29 distinct areas of significance, some of which may be further defined according to sub-themes. A property's "period of significance" is considered to be the span of time during which the property was associated with important events, activities, or persons, or when it acquired significant physical or artistic qualities. Information about a property's

National Register of Historic Places Associative Criteria

Criterion A Properties that are associated with events that have made a significant contribution to the broad patterns of our history.

Criterion B Properties that are associated with the lives of persons significant in our past.

Criterion C Properties that embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

Criterion D Properties that have yielded, or may be likely to yield, information important in prehistory and history.

Source: Department of the Interior, National Park Service. National Register Bulletin 16A: How to Complete the National Register Registration Form (Washington, D.C.: U.S. Department of the Interior, National Park Service, 1991).

historical context facilitates comparisons with other, similar properties. Contemporary data also are useful in developing historical contexts. For example, a resource that illustrates a once "commonplace" event, or represents an "ordinary" work of design or construction may nonetheless possess historical value if few of its kind survive today. Such research ultimately allows resource managers to make informed judgments about the cultural value of a particular property.

In addition to associative values, the NRHP evaluation prossess considers the historical integrity of the resource in making determinations about the property's significance. Historical integrity is defined to be the degree to which a property retains and exhibits those characteristics that it possessed when it achieved significance. Historical integrity is not equivalent to a resource's physical condition. A property may retain a high degree of historical integrity if all or most of its historic materials, features and form are extant, even though its overall current condition may be poor. Integrity is assessed in terms of seven qualities: location, design, setting, materials, workmanship, feeling, and association.² An integrity assessment results from a process of comparing what is known about a property's past form, physical characteristics, and associative properties with its current condition. A property's period of significance becomes the "benchmark" for measuring such changes. Such comparison reveals how a property has evolved through time. Although the retention of some characteristics may be more crucial than others, a full analysis of a property's historical integrity always depends upon the availability of reliable historical documentation. This may take the form of written descriptions, historic photographs, or extant, physical evidence.

Although the NRHP evaluation criteria and methodology may be applied to "places" of varying scales, until twenty or thirty years ago it most often was applied only to buildings, structures, and

Charles A. Birnbaum, ed., with Christine Capella Peters, The Secretary of the Interior's Standards for the Treatment of Historic Properties, with Guidelines for the Treatment of Cultural Landscapes (Washington, D.C.: U.S. Secretary of the Interior, National Park Service, 1996), 7.

² Department of the Interior, National Park Service, National Register Bulletin 16A: How to Complete the National Register Registration Form (Washington, D.C.: U.S. Department of the Interior, National Park Service, 1991).

objects. Even when utilized to evaluate and designate districts, most of the historical scholarship and analysis was directed toward architectural resources rather than other landscape elements. During the 1980s, however, the NRHP initiated an effort to better document and protect historic landscapes. One significant step in this direction was the development of guidelines that specifically interpret the NRHP inventory and evaluation process in terms of landscape resources. Documentation of historic vernacular landscapes was aided by the publication of Robert Z. Melnick's Cultural Landscapes: Rural Historic Districts in the National Park System in 1984, and National Register Bulletin 30: Guidelines for Evaluating and Documenting Rural Historic Landscapes six years later. Bulletin 30 outlines eleven landscape characteristics that may be used as a schema for reading and understanding rural cultural landscapes. Four of the characteristics refer to processes: (1) Land Uses and Activities, (2) Patterns of Spatial Organization; (3) Response to the Natural Environment; (4) Cultural traditions. The remaining seven characteristics are physical elements: (5) Circulation Networks, (6) Boundary Demarcations, (7) Vegetation Related to Land Use; (8) Buildings, Structures, and Objects; (9) Clusters (i.e., groups of buildings or other features); (10) Archeological Sites, (11) Small-scale Elements. Thus, the bulletin not only outlines a classification system and a means for collecting and organizing data; it also presents a methodology for understanding a complex landscape by conceptually reducing it into comprehensible elements, and then considering the landscape as a unified whole by linking various on-going processes with physical components.

The NRHP evaluation guidelines, as given in Bulletin 30, may be applied to landscapes of varying spatial scales. For example, the entire North Manitou Island landscape may be analyzed using the eleven characteristics listed above. In fact, analysis at a larger geographical scale is essential to understanding smaller, more discrete landscapes. In gaining a larger, macro view, however, finegrain details are incomprehensible or altogether lost. To obtain a more complete understanding of the landscape, it is necessary to conceptualize the island as a composite of many smaller, more-orless distinct landscapes. These could be conceived as "component landscapes"—integral pieces of the larger cultural landscape of North Manitou Island. For example, one might consider the Adam and Mary Maleski farm or the area around "Old Baldy" to be landscapes that possess physical and associative qualities that distinguish them from other parts of the island. Many of these component landscapes could, in turn, be broken down into even smaller landscape units, until, finally we are left with individual landscape elements, such as a dune, a garden space, a building, or a fence post.

Although every cultural landscape has a history, not every landscape possesses a high degree of historical significance. Historical research performed in tandem with landscape documentation

³ Robert Z. Melnick, with Daniel Sponn and Emma Jane Saxe, Cultural Landscapes: Rural Historic Districts in the National Park System (Washington, D.C.: U.S. Department of the Interior, National Park Service, 1984); Linda Flint McClelland, J. Timothy Keller, Genevieve P. Keller, and Robert Z. Melnick, National Register Bulletin 30: Guidelines for Evaluating and Documenting Rural Historic Landscapes (Washington, D.C.: U.S. Department of the Interior, National Park Service, 1990).

Definitions Used by the National Park Service for Documenting, Evaluating, and Developing Treatments for Cultural Landscapes

Feature — the smallest element(s) of a landscape that contributes to the significance and that can be the subject of a treatment intervention. Examples include a woodlot, hedge, lawn, specimen plant, allée, house, meadow or open field, fence, wall, earthwork, pond or pool, bollard, orchard, or agricultural terrace.

Historic character— the sum of all visual aspects, features, materials, and spaces associated with a cultural landscape's history, *i.e.* the original configuration together with losses and later changes. These qualities are often referred to as character-defining.

Character-defining Feature — a prominent or distinctive aspect, quality, or character of a cultural landscape that contributes significantly to its physical character. Land use patterns, vegetation, furnishings, decorative details and materials may be such features.

Integrity — the authenticity of a property's historic identity, evinced by the survival of physical characteristics that existed during the property's historic or prehistoric period. The seven qualities of integrity as defined by the National Register Program are location, setting, feeling, association, design, workmanship, and materials.

Significance — the meaning or value ascribed to a cultural landscape based on the National Register criteria for evaluation. It normally stems from a combination of association and integrity.

Treatment — work carried out to achieve a particular historic preservation goal.

SOURCE: Secretary of the Interior, "The Secretary of the Interior's Standards for the Treatment of Historic Properties, with Guidelines for the Treatment of Cultural Landscapes" (Washington, D.C.: U.S. Department of the Interior, National Park Service, 1996).

and evaluation, in the manner described in Bulletin 30, aim to identify those landscapes that represent certain cultural values and retain historical integrity. Ultimately, however, determining a landscape's historical significance is a matter of interpretation. Because our view of history is constantly changing, as is the material world in which we live, our assessment of a resource's historical significance can never be truly objective, free of cultural bias and independent of the current political and social climate. The dynamic, malleable nature of historical interpretation is a particularly vexing problem for resource managers who often seek objective, conclusive decisions about the treatment of a property. Given the subjective nature of historical interpretation, however, this quandary seems unavoidable. Methodological frameworks such as those represented by the National Register of Historic Places provide a basis for consensus. Nonetheless, historical scholarship must remain an on-going component of resource management, and treatment plans must be flexible enough to accommodate future changes in historical interpretation and cultural resource management philosophy. Complex resources, such as the cultural landscapes of North Manitou Island, accommodate, and often demand, more expansive, more inclusive histories, and more liberal treatment approaches.

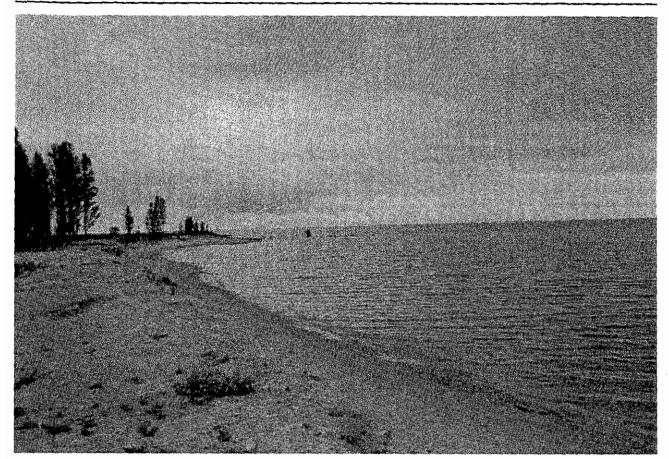


Figure 5.1. The island shoreline has influenced patterns of culture-nature interactions, which are expressed in the environment as coastal prehistoric occupation sites, clearings, relict docks and wharves, and remnant fishing camps. The margin between land and water is both a physical and a perceptual boundary.

Evaluation of North Manitou Island

In terms of the classic definition articulated by geographer Carl O. Sauer, all of North Manitou Island is indeed a cultural landscape. Even the wildest, most remote parts of the island have been impacted in some fashion by past human activities. In some places, the imprint of humanity may be slight, while in other instances the evidence may be masked by the passage of time. All of the island's landscapes have a history that includes both human and non-human nature.

Because it is relatively small and geographically isolated, the entire landscape of North Manitou Island easily can be conceptualized as a totality. The shoreline of the island—the line where water and land meet—represents a distinct boundary that is both physical and perceptual, demarcating both geographic space and human comprehension of the landscape as a distant place (figure 5.1). The shoreline likewise circumscribes a tightly-bounded setting for human activities and social interactions. Landscape and community in such a setting are so intertwined that they must be considered in tandem, as equal components of a locality that has a potent and unique identity. Consequently, any evaluation of the island's history and its historic landscapes must be highly self-referential, perhaps more so than in other geographic contexts. In other words, individual events must be considered first in relation to the context of the island's history, as well as in relation to the historical context of the larger

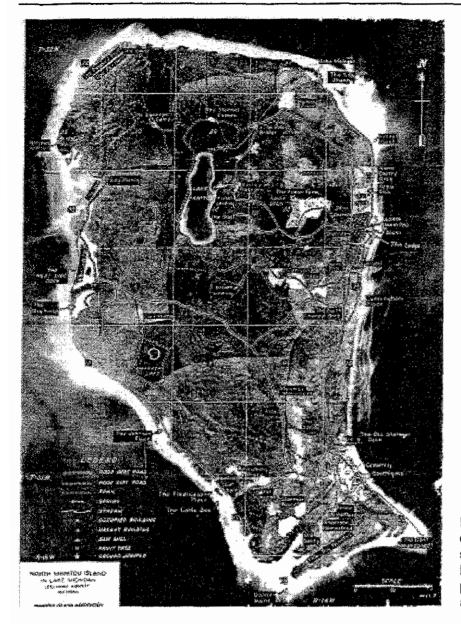


Figure 5.2. Manitou Island Association map of North Manitou Island, ca. 1940s, showing the geographical relationship between natural and cultural features. The photo basemap emphasizes the shoreline as a spatial boundary.

Sleeping Bear Dunes region. The island itself becomes the primary, or most basic, geographic scale for assessing the importance of persons and events in the history of the island as a human community and as a landscape. Essentially, the island serves as the basis for determining "local" significance.

As suggested above, the shoreline of North Manitou Island is, perhaps, its most important physical feature (figure 5.2). Some of the island's most distinctive plant and wildlife habitats occur along the shoreline ecotone. In addition to functioning as a natural boundary or verge, the shoreline was the single physical feature that most influenced human settlement on North Manitou. As the interface between land and water, nodes of connection between the island and the Michigan mainland were necessarily located along this line. As a result, human settlement and development were most intensive around the perimeter of the island, where island settlers at various times constructed docks, wharves, wooding stations, fishing shan-

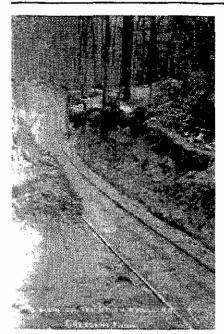
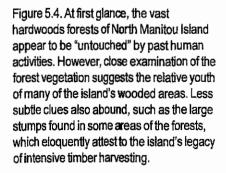


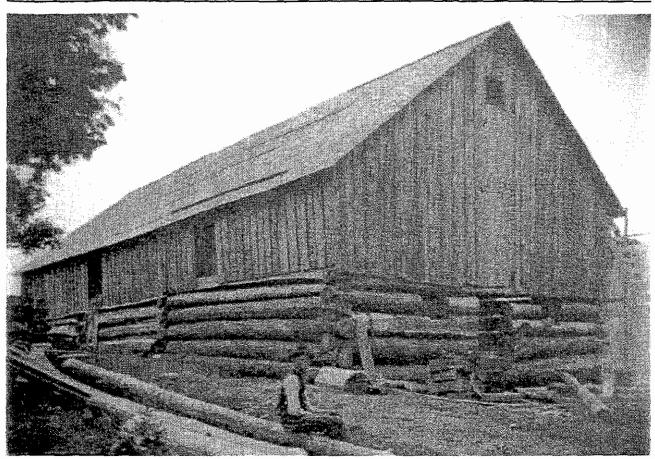
Figure 5.3. Narrow-gauge rail spur that connected the lumber town of Crescent with the forested interior of northern North Manitou Island, ca. 1908. The historic railroad grade survives today, utilized as a foot trail by hikers and backpackers.

ties, and navigation aids. Settlement was concentrated in three general areas: North Manitou Village on the eastern side of the island, the Crescent vicinity on the western side of the island, and the southeastern tip, which was the initial locus of Euro-American settlement, and subsequently the location of the U.S. government lighthouse and the area where most of the island's agricultural homesteads were clustered. These shoreline nodes were connected to interior farmsteads and features such as Lake Manitou by a network of roads and trails. The primary road system was a loop that roughly circumnavigated the island, following the shoreline and thus reinforcing its role in organizing geographic space and directing movement through the landscape.

The interior of the island was developed less intensively than the shoreline nodes, although it was no less modified by human activities. Much of the interior landscape remained as forest land, although the woods were successively logged for over a century. Significant portions of the island's interior were stripped intermittently of much of their forest vegetation, and then allowed to recover. Historically, logging may have been the most important economic enterprise on North Manitou Island. Certainly it was the human activity that lasted for the longest period of time: the North Manitou forests first attracted white settlers to the island, and sustained the Angell Foundation's operations long after agriculture had been abandoned and recreation had proven unprofitable. Logging may have permanently altered the composition of the island's forest vegetation. Timber harvesting also left its impact on the island's landscape in the remains of the Crescent lumber camp, a relict railroad grade, several smaller camps, and an extensive network of logging trails, much of which is now fading as small trees and saplings fill in the linear gaps that wend through the woods (figures 5.3 and 5.4). Today, most of the island landscape remains densely forested, a spectacular expanse of sugar maple and Ameri-







can beech forest that stretches over "pleasantly rolling" terrain. This shady, park-like woodland is interrupted only infrequently by a few large, sunny clearings—the remnant landscapes of agriculture on North Manitou.

In contrast to South Manitou Island and the mainland, agriculture on North Manitou was characteristically large-scale and highly-organized. In the case of Nicholas Pickard's large farm on the eastern side, the Crescent farm, and Peter Stormer's farm, agriculture was undertaken primarily to sustain lumbering activities (figure 5.5). Frederic Beuham's apple orchard and the Manitou Island Association's cherry orchards near North Manitou Village represent large-scale, commercial ventures. A different pattern characterized farming at the southeastern tip of the island. The homesteads clustered there were mostly small-scale farms that were owned and worked by single men or individual families. None of these homesteads, it seems, progressed much beyond subsistence agriculture. The largest and most extensively developed farm at the southern end of the island, that of Alvar and Mary Bournique, functioned primarily as a private resort ranch. At the opposite end of the island, however, the Maleski family managed to survive on the production of their small farm and the income they received from selling a few commodities to other North Manitou families and summer resort residents.

Figure 5.5. The provenance of this large log barn is unknown. A structure of this size would have been beyond the means and requirements of the island's immigrant homesteaders. The scale of the barn, as well as the massive timbers that make up the lower portion of the structure, suggest that this building may have been built by one of the logging camp operators, perhaps even Nicholas Pickard. The barn may have been on the island during the late 1890s, however its former location is unknown. Like many of the myriad agricultural structures built on North Manitou Island over a period of nearly a century, this immense building has vanished from the island landscape.

Figure 5.6. In addition to the deer herd itself, several ramshackle blinds scattered throughout the island's forests represent the island's history as a commercial "deer ranch" and a recreational landscape for an elite class of sportsmen. Many of the blinds, like this one, were former privies that the Manitou Island Association moved from abandoned home sites to various locales in the woods.



Although it was less extensive, the impact of farming on the North Manitou landscape may be more obvious to the casual observer than that of logging. The ecological effects of logging were drastic and long-lasting. Intensive logging was cyclical, and periodically altered the vegetation composition in ways that eventually were masked after relict saplings and pioneer tree species reclaimed the cut-over areas. Following a period of intensive timber harvesting, logged lands were abandoned and allowed to return to deciduous forest, assuming a spatial and visual character similar to that which had existed previously. Farming, however, not only altered the vegetation composition of once-forested areas, but also transformed the spatial qualities of the landscape, neatly defining spaces and creating distinct edges and boundary demarcations with land uses, vegetation, fences, and buildings.

Today, large clearings remain scattered throughout the forests that cover most of the island. Generally, these clearings are clustered in the vicinity of North Manitou Village, at the southern end of the island, and near the Crescent townsite. Three large, distinct clearings remain in the east-central portion of the island, linked by a former road segment that connects with roadways leading to the eastern shore and Lake Manitou. The former fields of the Maleski family are the only relict agricultural landscapes in the northern portion of the island. In a sense, even the dense forest that encloses these spaces is part of an agricultural landscape, since several island farmers, including Silas Boardman, the Newhalls, the Manitou Island Syndicate, and the Maleskis, used the woods for grazing cattle. Later, the island's second- and third-growth forests, as well as its abandoned agricultural clearings, served a vital function in the MIA's "deer ranching" venture (figure 5.6).

Management of North Manitou Island as a recreational wilderness, a process that began during the 1920s with the formation of the Manitou Island Association, purposefully erased much



evidence of past agricultural activities from the landscape. However, many subtle clues—and a few tangible reminders—do remain. Many of the island's relict agricultural landscapes are highly fragmented and spatially scattered. The vestiges range in scale from vast clearings of more than a hundred acres, to small elements such as a wooden fence post and a length of barbed wire. Between these extremes are huge barns, house foundations, orchards, and windbreaks.

The clearings are, perhaps, the most striking relict agricultural features on the island (figure 5.7). Their spatial integrity is, a bit ironically, meticulously maintained by the North Manitou deer herd. The clearings serve a vital function in maintaining diversity and interest in the larger island landscape. Scattered throughout the patchwork of clearings and woodland edges, is remnant cultural vegetation, such as apple and pear trees. The most extensive historic vegetation feature is the huge relict apple orchard planted by Frederic Beuham and the Stark Bros. Nursery and Orchard Co. around the end of the nineteenth century. Another noteworthy utilitarian vegetation feature is the cottonwood windbreak at the Bournique farm. Examples of ornamental vegetation remain as well-roses and spirea at the Maleski farm, and lilacs (Syringa vulgaris, var.) and sugar maples (Acer saccharum) at the Bournique residence. Most of the structures no longer exist or are in ruinous condition, the Manitou Island Association farm being the most intact complex of farm structures remaining on the island. With the

Figure 5.7. Agricultural clearing associated with the town of Crescent and the west-side farm of the Manitou Island Association.

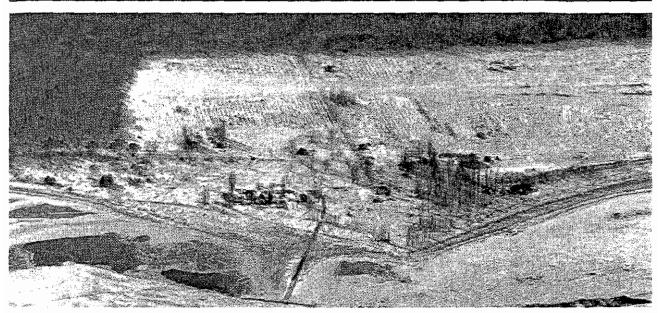
Although most of the agricultural clearings that existed on the island when the MIA introduced white tailed deer retain good spatial integrity, trees and shrubs are slowly gaining a foothold in some areas.

exception of the Alvar and Mary Bournique residence, none of the houses built by homesteaders remain intact, and none of the barns built by homesteaders survive. In fact, the only intact, agricultural structure owned by an individual, private farmer is a small corncrib on the Bournique farm. This makes the island's surviving, intact farm structures all the more valuable.

The following text represents a National Register of Historic Places evaluation of the remnant agricultural properties on North Manitou Island.⁴ North Manitou Village is presented as a composite of three distinct districts. Following a brief overview, each district is discussed individually. Subsequent sections deal with the island's other agricultural and agriculture-related districts and resource. The applicable period(s) of significance, level(s) of significance, and NRHP criteria and historical context(s) are cited at the beginning of each section. The discussion generally follows the evaluation framework outlined in the beginning of this chapter. Management recommendations for several of the following properties are presented in chapter six.

会会会

⁴ For more detailed historical and descriptive information, see Chapter Four.



HISTORIC PROPERTIES ON NORTH MANITOU ISLAND

Figure 5.8. Aerial view of North Manitou Village, winter 1994.

North Manitou Village

Situated near the center of Section 34, T32N R14W, the North Manitou Village area is the location of the most intensive and continuous human settlement on the island (figure 5.8). The site was the location of one of Nicholas Pickard's wooding stations, and probably served as the headquarters of his wood cutting operation during the 1860s and early 1870s. At least a portion of the large clearing that currently surrounds the village may date from the extensive farm that supported Pickard's wooding enterprise. Ever since the construction of Pickard's wooding dock, the village has functioned as the center of North Manitou Island's economic and social life. In terms of its longevity and historical associations, it is the most important node of human settlement on the island.

The centrality of North Manitou village was reinforced by the construction of a life-boat station there in 1877. The U.S. Life-saving Service station subsequently expanded and evolved into a U.S. Coast Guard station, an entity that formed the nucleus of the village (figure 5.9). The station played an important role in the economic and social life of the island from the late nineteenth century into the 1930s.

During the mid-1880s, Silas Boardman established a large stock farm not far from the life-saving service station, once again making the village an important center of agricultural activity. Boardman maintained the village dock, and later was instrumental in developing the island as a resort. Friends and members of the Boardman family organized Cottage Row in 1894, and a flourishing resort culture developed at the village during late 1890s and early 1900s. After the Newhall family took possession of Boardman's

⁵ Pickard operated a 400-acre farm in 1860. Pickard's first dock and wharf, established in the 1840s, were located at the southeastern end of the island. It is not known when he built the northern dock, although he purchased the land in Section 34, T32N, R14W in 1849. It is reasonable to assume that the timber supply at the southeastern tip may have been depleted by 1860, and that Pickard may have moved his headquarters to the northern site by then. Pickard's farm was still functioning in 1870. When the U.S. Life Saving Service was established seven years later, it was located at the village, not at the southeastern site, suggesting that the village site was then the hub of activity on the island; it seems likely that Pickard's farm also was located nearby.

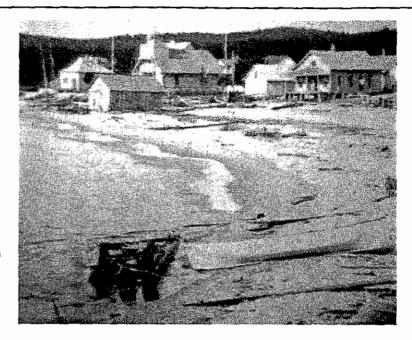
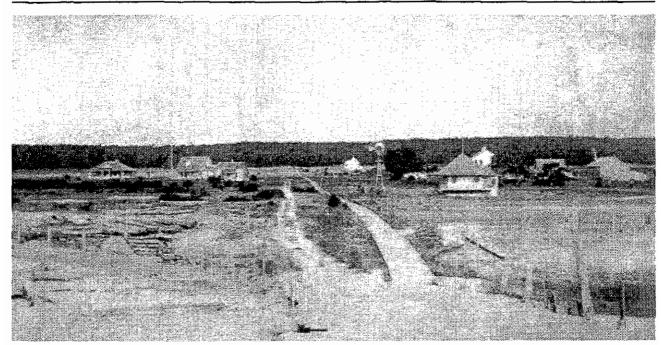


Figure 5.9. The U.S. Life Saving Station complex, which expanded significantly during the second half of the nineteenth century, formed the core of North Manitou Village.

North Manitou property, they also used the village as their head-quarters, promoting the island as an exclusive resort, and engaging in large-scale fruit production (figure 5.10). When the Manitou Island Syndicate emerged in the early 1920s, it too was headquartered at the village. A few years later, as the Manitou Island Association (MIA), this organization of Chicago businessmen constructed a new cluster of farm buildings and established extensive cherry orchards in the cleared lands surrounding the village. The MIA eventually acquired most of the Cottage Row properties and the buildings of the U.S. Coast Guard station, thus transforming the village into a small "company town."

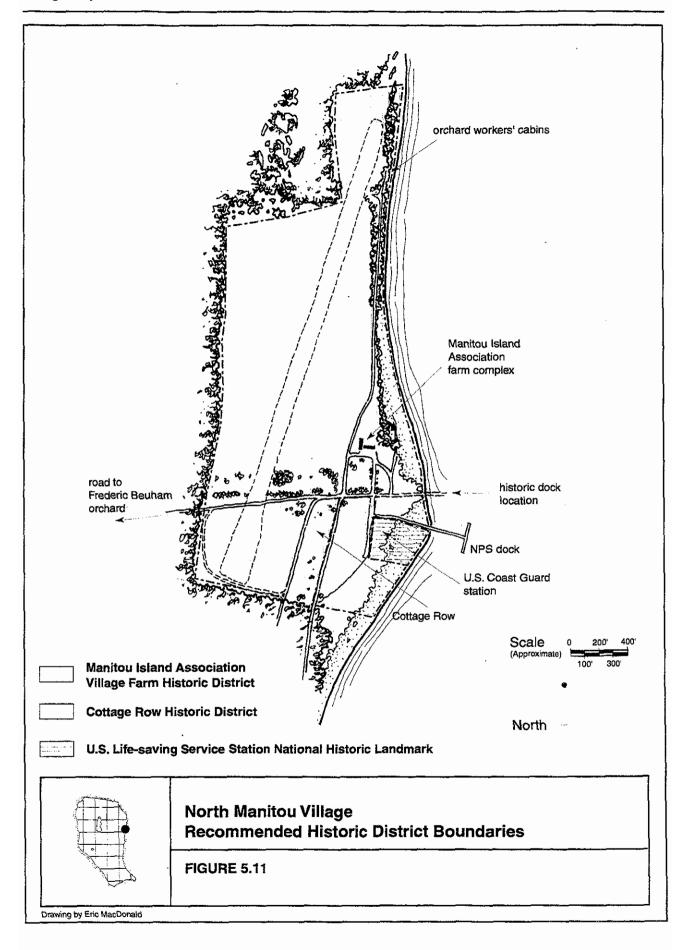
Each of the four principal themes that explain the growth of North Manitou Village-logging, agriculture, maritime commerce, and recreation—are represented by elements that persist in the cultural landscape. Considered together, these resources portray the evolution of the village from the mid-1850s through the present. The current landscape, like those that preceded it, reveals its history as a remote maritime outpost, as a source of timber and lumber, as a commercial farming center, and as a quiet, exclusive resort community. Yet the juxtaposition of these elements, which represented different themes and times, presents a narrative of the landscape's evolution. This narrative is expressed through traces of former roadways, relict vegetation, and buildings and structures, including both those that are sinking in ruin and others that remain standing. Previous land uses and historical associations, such as the farms of Nicholas Pickard and Silas Boardman, have been almost completely obliterated and replaced with newer, more recent landscapes. The landscape today is never exactly as it was at any time in the past, and the transformative processes of nature guarantee that it is now as it never will be in the future.



The landscapes and groupings of buildings that currently comprise the North Manitou Village area survive with varying degrees of historical integrity. Nonetheless, the intensity and longevity of human activity at this location—and the fact that its history is still evident—make the narrative an important one. This is one of the most interesting, significant, and complex landscapes on the island. The core village landscape—the area where buildings and other cultural landscape features are concentrated—can be divided conceptually into three more-or-less distinct component landscapes, or districts (Fig. 5.11). These are differentiated primarily in terms of historical associations, land uses, spatial organization, and building types. The three districts are: (1) Manitou Island Association Village Farm Complex, located north and west of the life-saving service and Cottage Row; (2) U.S. Life-Saving Service, located along the lakeshore at the center of the village, and (3) Cottage Row, located west and southwest of the life-saving service.

The boundaries of these districts are not expressed sharply in the landscape, although they are generally suggested by the spatial arrangement of buildings and vegetation. Precise boundaries are provided for the overall extent of the developed land area and, within this area, by the historic property lines that legally defined the parcels upon which the three districts evolved. These component landscapes should be conceived as parts of a larger whole. As depicted in figure 5.11, the three districts are contiguous, comprising the core of the historic village area and the expanse of cleared land that surrounds it. Although they are distinct in terms of material form and provenance, they nonetheless evolved in concert with one another, and constitute a larger historic artifact.

Figure 5.10. Perhaps since the midnineteenth century, North Manitou Village served as headquarters of the island's largest agricultural operations. This view of the northern portion of the village was taken when the Newhall family and their associates controlled the village farm and much of the resort development known as Cottage Row.



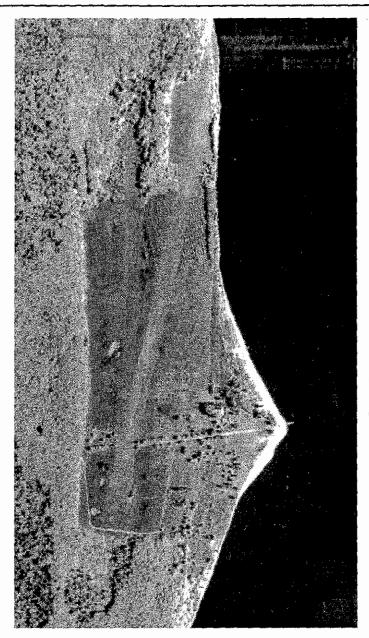


Figure 5.12. U.S. Department of Agriculture aerial photograph of the North Manitou Village area, 1938. The size and shape of the agricultural clearing surrounding the village has changed little since this photograph was taken.

Manitou Island Syndicate / Manitou Island Association North Manitou Village Farm Complex

Period of Significance: 1927-1950

NRHP Criteria: A, C

Level of Significance: Local⁶

The Manitou Island Association dominated island life beginning in the late 1920s. Following the closure of the North Manitou U.S. Coast Guard station, the MIA was the largest employer on the island. From its inception, the MIA controlled most of the land area of the island, and it continued to expand its landholdings to make North Manitou a "company island." The economy of the island centered on the activities of the MIA, which in turn dramatically altered the entire landscape of North Manitou Island, from the abandoned farmsteads of nineteenth-century homesteaders, to the

⁶ As a whole, the district is significant in terms of the historical context of North Manitou Island. The MIA sawmill, which is part of the district, is a unique resource within Michigan, and probably possesses state-level historical significance. In addition, the district should be compared with similar corporate farming ventures in Michigan to determined whether it possess a state level of significance.

flora and fauna of the island's vast forests. No other extant resource so fully represents the nature, scale and scope of the MIA's business ventures on North Manitou Island. Furthermore, no other district within the boundaries of Sleeping Bear Dunes so well represents corporate agriculture and large-scale fruit production during the early twentieth century. This particular context is all the more important when one considers the significance of this type of agriculture to the present economy and regional identity of north-western lower Michigan.

The Manitou Island Syndicate / Manitou Island Association North Manitou Village Farm Complex encompasses the portion of North Manitou Village that served as the base of the Manitou Island Association's agriculture, logging, and recreation operations-it is the "working landscape" of the village. It borders the Cottage Row Historic District and the North Manitou Island Lifesaving Station National Historic Landmark District to the south and east, and includes the vast clearing that surrounds the nucleus of the village. It is probable that the village has been surrounded by a large expanse of cleared land since its founding in the mid-nineteenth century. If Nicholas Pickard's North Manitou farm encompassed 200 acres of improved land, as he claimed in 1870, then much, if not all, of the existing cleared land surrounding the village likely dates from his agricultural operation of the mid-1850s through the early-1870s. Pickard's improved acreage no doubt was utilized by its subsequent owners, Silas Boardman and the Newhalls. During the late 1920s, the Manitou Island Association developed much of the clearing as its principal cherry orchards. When the island's resident workforce declined during the 1930s, the MIA built a cluster of small wooden cabins at the northeastern edge of the clearing to serve as temporary housing for migrant workers during cherry harvests. Other portions of the clearing were used for agricultural crops, pasture, and the MIA airstrip.

The cleared land around North Manitou Village thus represents the continuity and importance of agriculture at the village for nearly a century. Unfortunately, this portion of the district also retains a lower level of historical integrity. Neither the precise location of Pickard's farmstead, nor its spatial configuration is currently known. Traces of Pickard's farm probably were obliterated by the subsequent agricultural activities of Silas Boardman, the Newhalls, and the MIA.

Historic aerial photographs suggest that the clearing probably retains spatial integrity (i.e., size, edges, and shape) from the MIA era (1927-1950); however, land uses and vegetation have changed significantly (figure 5.12). The MIA airstrip and hangar were removed by the National Park Service, and are only barely evident in the landscape today. In accordance with state regulations, the Angell Foundation removed the cherry trees soon after it ceased fruit production on the island. A small, remnant butternut (Juglans cinered)



Figure 5.13. The MIA sawmill represents an important theme in North Manitou Island's human history, and is a rare, intact example of a steam-powered lumber mill in Michigan.

grove survives north of Cottage Row along the road that connects the former village dock with Lake Manitou. In addition, a few relict apple trees exist at the northern edge of the clearing, along with four of the original cherry pickers' cabins, all of which now are structural ruins. Fences, if they existed, have been removed. Still, this expansive clearing serves an important function in defining the landscape setting for the village. Historic land use patterns are discernible in the vicinity of the former airstrip, where dead trees and stumps convey the planting pattern of the old orchards. The area continues to convey a sense of the scale of agricultural activities at the village, and retains the general open character of cultivated land, which is an essential characteristic of agricultural landscapes.

The farm structures used by the MIA are clustered north of the life-saving service station and cottage row. All of the structures in the district were built by the Manitou Island Association, with the exception of the Campbell House, and perhaps one or two other sheds that were moved by the MIA from nearby sites. The district's pivotal structures are the MIA sawmill and the large, gambrel-roofed village barn (figures 5.13 and 5.14). Although the MIA never engaged in intensive commercial lumber production at its sawmill, the structure nonetheless represents the importance of historic logging activities on North Manitou Island. No other resource associated with timber harvesting and processing on North Manitou retains a comparable level of historical integrity. Furthermore, the structure, which is constructed of materials salvaged from Peter Stormer's former mill and perhaps other sources, is itself part of the island's logging-era legacy. The mill possesses additional significance as the only steam-powered sawmill in the state of Michigan that retains all of its original equipment.7

The Manitou Island Association barn, built in 1927, is the most physically impressive structure in the district. Due to its large size, shiny metal roof, and its situation on the crest of the beach

⁷ William Herd, personal communication.

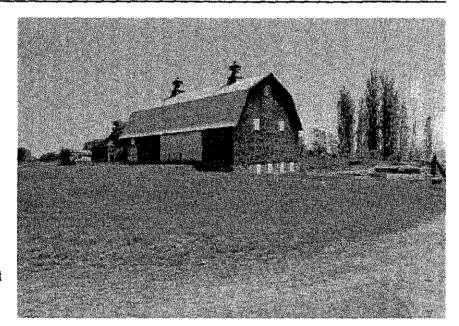


Figure 5.14. The Manitou Island
Association barn is the largest and most visually prominent structure in North
Manitou Village.

ridge, the barn is a prominent landmark, visible from almost any position within the village vicinity. The barn is an excellent example of plank truss construction, a structural system common in Michigan during the early and mid-twentieth century. With the addition of multi-level storage lofts for cherries, and a cold storage locker for venison, the structure was adapted to accommodate the peculiarities of the MIA's commercial agriculture and recreation ventures. Constructed mostly of local materials, the structure reflects the singularity of its location and its historical context.

The historical integrity of other structures in the district has suffered most substantially due to purposeful neglect, as intended in the North Manitou Island Development Concept Plan prepared by the NPS in 1987. The most unfortunate losses are the machine shed and carpenter shop, both of which were structurally sound in 1979. These structures served vital functions in the seasonal and daily activities of the MIA and the village community. In addition, they served an important spatial function in defining the edge of the complex and delimiting the edge of the road.

The MIA equipment shed is another structure that plays a vital role in defining outdoor spaces within the farm complex. This structure is more visually prominent than the carpenter and machine shops, and defines the barnyard and a courtyard, or "farm equipment yard." In 1996 the original equipment shed was removed by the NPS and replaced by a new building. Although the original structure is no longer extant, the exterior of the new building duplicates the appearance of the historic equipment shed. The new structure also was erected precisely on the site of the historic shed, thus preserving its function as the boundary between barnyard and equipment yard.

The new equipment shed was constructed as part of an alternative energy project on North Manitou Island. A photovoltaic

⁸ Hemalata C. Dandekar, Robert M. Darvis and Eric Allen MacDonald, Structural Preservation and Adaptive Reuse of Michigan Barns (Lansing, Mich.: Michigan Department of State, 1992).

(PV) array was constructed in the district in 1996. Located downhill from the beach ridge, south of the equipment shed and below the carpenter and machine shop ruins, the PV array is a modern, utilitarian structure of concrete, metal, PVC plastic, and other synthetic materials. The facility is visually incongruous with the historic landscape that surrounds it. However, it is partially screened from direct view by vegetation and topography, and its utilitarian purpose is consistent with the historical function of the farm complex.

The resources of the Manitou Island Syndicate / Manitou Island Association Farm Complex district, including the clearing and cluster of utilitarian agricultural structures, represent the scope of the MIA's economic activities on the island. Taken as a whole, no other resource so well represents the influence that the MIA had on the history and landscape of the island. Although it is situated amidst a remote island "wilderness," the MIA village farm represents an opportunity to preserve and interpret an important early twentieth-century remnant of what are certainly three of the most significant human activities that have shaped (and continue to shape) the landscape of the Sleeping Bear Dunes Region: lumbering, recreation, and commercial fruit production.

North Manitou Island Life-saving Station

Period of Significance: 1854-1932

NRHP Criteria: A, C

Level of Significance: National

The life-saving service played an important role in the economy of North Manitou Island. The government jobs associated with the station represented a reliable source of cash income flowing into the island economy. Young men from several island farm families took jobs with the U.S. Coast Guard. In addition, the crew and their families provided a local market for agricultural commodities produced on the island. The station also represented a small labor market for chores traditionally undertaken by women, such as washing, sewing, cleaning, and canning. The station crew provided the island with fire protection, first-aid, and police services, and also served as a vital communication link with the mainland and the outside world, and as a center of island social life.

The historic district contains the buildings and landscape features associated with the evolution of the life-saving station on North Manitou Island, beginning with the construction of the volunteer rescue station in 1854, through 1932, the last year that the station operated with a full-time crew (figure 5.15). The pivotal resource within the complex is the Volunteer Rescue Station, built in 1854, and now considered to be the only example of this building type remaining in the country. The North Manitou Island U.S. Lifesaving Service Station complex was designated a National Historic Landmark on 6 August 1998.

⁹ William Herd and Kimberly Mann, "North Manitou Island Life-saving Station," National Register of Historic Places Registration Form, 1994, Sleeping Bear Dunes National Lakeshore, Empire, Mich.



Figure 5.15. The North Manitou Island U.S. Life-saving Service Station complex became a National Historic Landmark in 1998. Because of its location near the shore and the NPS dock, the district is a visually prominent historic landscape.

The boundaries and other significant features of the district are depicted in figure 5.16. The buildings are oriented toward the lake, and are arranged linearly along a stretch of sandy beach. Historic photographs of the area suggest that buildings in the vicinity of the station were highly mobile. The Hans Halseth House, for example, originally was built a considerable distance from its current site near the northern edge of the district. Nevertheless, the existing spatial arrangement of the district has remained unchanged since the early 1930s when the U.S. Coast Guard abandoned the station.

The eastern edge of the core of the complex is bounded spatially by a concrete retaining wall dating from the 1890s. Individual buildings are connected to one another by a network of concrete walkways built in 1905. Small-scale elements include concrete lookout tower abutments, a storm tower and flag locker, and a capstan. Several large Lombardy poplar (*Populus nigra*) trees in the district date from the coast guard era. Other ornamental vegetation, including copses of black locust (*Robinia pseudoacacia*) trees, Norway maple (*Acer plantanoides*) trees, lilac and spirea shrubs, and oriental poppies, were added to the property by the Manitou Island Association or the Angell Foundation.

The resources that comprise this district represent the evolution of the Life-saving Service on the Great Lakes, from its earliest

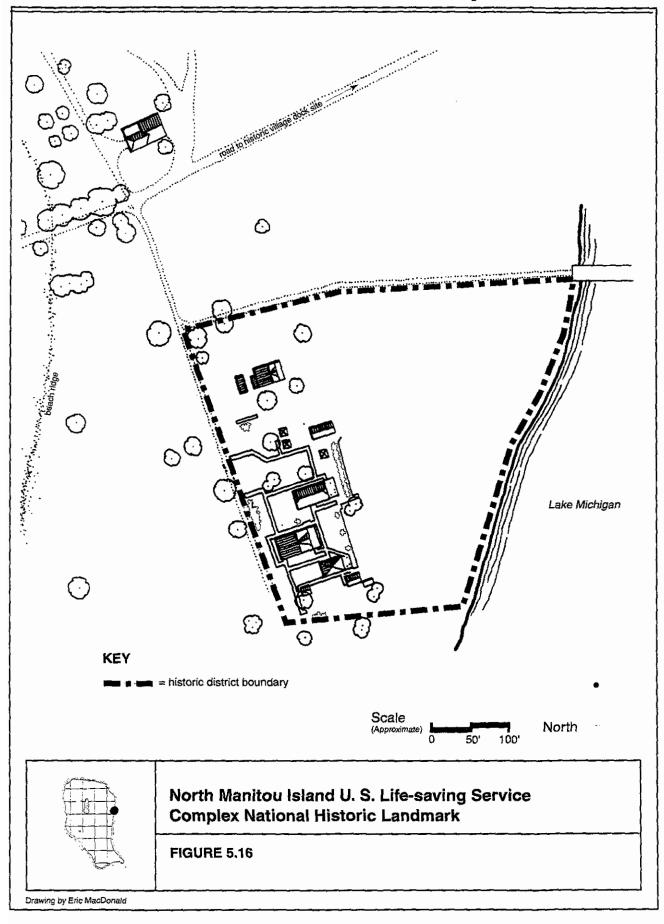


Figure 5.16. The U.S. Life Saving Service and Cottage Row's summer residents infused the relatively isolated North Manitou Island economy with cash, and linked the island with the larger regional economy. Many year-round residents, especially women and children, earned cash wages by performing domestic chores such as washing, cleaning, and cooking.



beginnings into the Coast Guard era. No other station on the Great Lakes represents such a broad span of maritime history. For this reason, the North Manitou Island Life-saving Station recently was designated a National Historic Landmark.

Cottage Row

Period of Significance: 1894-1950

Criteria: A, B,10 C

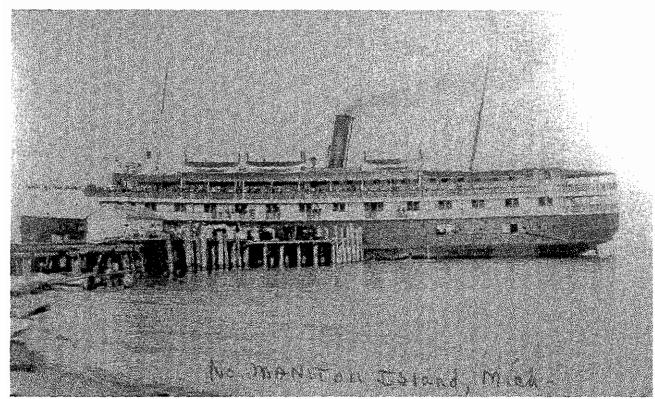
Level of Significance: State or National¹¹

Much like the North Manitou life-saving service station, the resort development known as Cottage Row played a peripheral role in the history of agriculture on the island. The cottage and hotel owners and their guests represented a much-needed local market for agricultural commodities. The summer colony and hotels of North Manitou Village provided cash income to the Maleski family and other North Manitou farm families who sold dairy products and fresh fruits and vegetables to Cottage Row residents and guests. The summer hotels also were a source of off-farm employment, especially for women and children (figure 5.16). The primary significance of the district, however, is its association with use of the island for recreation, its ties with Chicago and Great Lakes commerce, and its regional importance as an example of late nineteenth-century resort cottage developments (figures 5.17 and 5.18).

Cottage Row was the island's only speculative resort enterprise, the first of subsequent efforts to turn the island into an exclu-

¹⁰ The property's association with William Angell (criterion B) primarily applies to the "Monte Carlo" cottage, which Angell used as his island residence. Criterion B applies, perhaps, not to the entire district, but only to that particular resource.

11 The Cottage Row Historic District clearly appears to meet the NRHP criteria at the local level of significance. However, the district may be additionally significant within the northern Great Lakes Region and the nation. Such an evaluation must consider other extant resources within the region, a task outside the scope of this study. The 1894 cottages of Cottage Row are part of the National Maritime Initiative Landscape District, which is currently proposed by the NPS for the national level of significance. The period of significance for the district probably would be 1894-1926, prior to the organization of the MIA. The MIA period of significance would begin at 1926 and end circa 1950.



sive retreat. The scheme of individually-owned cottages supported by a communal kitchen and dining facility exemplifies a type of resort development that was common during the nineteenth century. It represents a broad trend in recreation on the Great Lakes region, the history of which largely has been lost due to changes in life styles and economics. Besides being a distinctive type of development, several of the cottages are architecturally significant. Regardless of any possible association with architect Frank Lloyd Wright, the Trude, Foote, and "Monte Carlo" cottages are based on a vernacular plan that is extremely uncommon in the Upper Midwest. How the dog-trot plan got from the Mississippi Delta region to northern Michigan may always remain a mystery. The fact that these buildings were constructed with materials recycled from the Chicago World's Columbian Exposition of 1893, adds additional regional significance.

Other Cottage Row structures possess architectural distinction. The significance of the Katie Shepard Hotel, a good example of a small, shingle-style hotel building, was acknowledged in 1987. In addition, the Alford's choice of a Sears & Roebuck cottage represents a pragmatic solution to a situation where materials, skill, and social connections may have been limiting factors. It also represents the growth of mass-produced and mass-marketed housing products, in contrast to the other carpenter-built cottages of the district. In terms of design and provenance, North Manitou Island's Gulf Coast dog-trot cottages are architectural enigmas that should be preserved, researched further, and made accessible to the public through an interpretive program, at the very least. The Monte Carlo cottage may be the best example of this plan (figure 5.19). The

Figure 5.17. The passenger ship Puritan docked at the North Manitou Village pier, ca. 1900. Steamers such as the Puritan connected the island with Chicago and other mainland cities, and made use of the island as a resort feasible.



Figure 5.18. Resorters enjoy a stroll on the boardwalk, ca. 1900. Cottage Row was a landscape of recreation and pleasure. It represents a distinctive nineteenth-century resort type, and is a significant component of a larger historic maritime landscape.

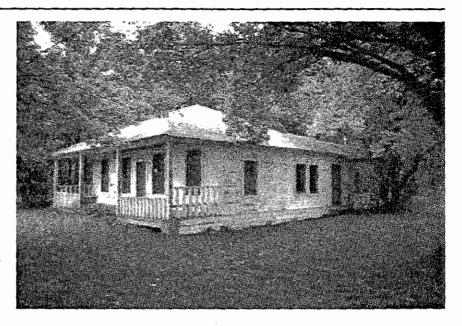
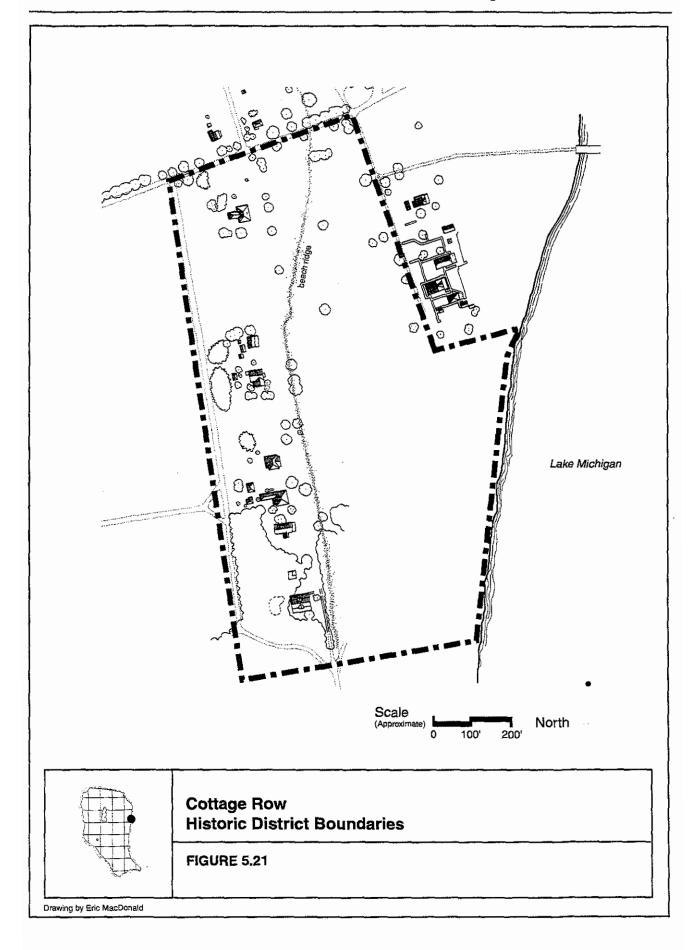


Figure 5.19. In addition to important historical associations, most of the intact structures of Cottage Row possess architectural significance. They should be stabilized, rehabilitated, and interpreted.

Monte Carlo cottage has additional significance due to its association with William Angell. An important business man, Angell represents the age of the "captains of industry," and the ascendancy of the automobile industry in Michigan and the Midwest.

The boundaries of the proposed Cottage Row Historic District correspond to those of the subdivision platted by W. O. Greene in 1894, plus the lot occupied by the Monte Carlo cottage and the site of the former MIA lodge (figure 5.20). The district includes the Katie Shepard Hotel, which was determined to be individually eligible in 1987, in addition to the nine other parcels that were part of the original development, along with their associated cultural features. Unfortunately, the integrity of this district also has declined since implementation of the 1987 North Manitou Island Development Concept Plan/Interpretive Prospectus, which calls for the removal of all of Cottage Row's buildings and structures. The most unfortunate recent loss is the summer home that once was owned by two of Cottage Row's developers, George and Carrie Blossom. The oldest building in the district, the Blossoms' "Tanglewood" is now a ruin that occupies a prime lot near the center of Cottage Row. The district's most peculiar structure, the Margaret (Rhoades) and Roderick Peartie "tree house," also is on the verge of ruin. However, the majority of the district's remaining buildings are in comparably good condition. Most have suffered very little in terms of alterations, and their biggest threat is decay due to neglect.

In addition to several significant buildings and structures, the Cottage Row district also retains a rich array of ornamental vegetation and small-scale landscape features, such as the rain water cistern at the Foote cottage, the sole remaining example of an element that physical evidence suggests was once nearly ubiquitous on the island. The spatial integrity of the former Cottage Row boardwalk remains intact, defined by a row of large maple trees that line the edge of the



bluff. On individual lots, lilacs, white spirea, day lilies, and fragrant roses persist These features evoke a sense of the past, recalling lazy summer days spent sipping lemonade on the front porch and watching steamships ply the Manitou Passage. Cottage Row remains one of the most important and most distinctive historic landscapes on North Manitou Island.

Manitou Island Association West Side Barn

Period of Significance: 1927-1950

Criterion: A, C

Level of Significance: Local

The MIA West Side Barn is the only remaining, intact resource representing the MIA's west-side operations on North Manitou Island. Furthermore, this structure was, and still is, the largest barn built on North Manitou, and it is an excellent example of a plank-truss frame structure, a type common during the early 20th century. It therefore meets NRHP criteria A and C. Although the barn has not been maintained by the NPS, it remains in excellent structural condition. The barn originally was part of a larger farm complex utilized by the MIA. Although this agricultural facility was not as extensive as that at the village on the eastern side of the island, it similarly consisted of a complex of fields, agricultural outbuildings and a house. The farm house, built by Peter Swanson and John Swenson in the 1880s, as well as other buildings that existed at the site during the MIA era, are gone. One outbuilding, which allegedly dates from the Crescent lumber camp, remains nearby as a ruin. The land surrounding the barn may retain spatial integrity, but there is little physical evidence of former land-use patterns. Small trees and shrubs are invading the central portion of primary west-side clearing. Because the surrounding landscape possesses only a marginal degree of historical integrity, only the barn is considered eligible for inclusion in the NRHP. It should be noted, however, that the former Crescent townsite may represent a significant historical archaeological resource.

Frederic M. Beuham Orchard

Period of Significance 1881-1950

NRHP Criterion: A

Level of Significance: Local

Fruit trees and small orchards were ubiquitous components of historic agricultural landscapes. Almost every farm had at least one fruit tree, usually to supply apples. An orchard provided the family with apple butter, dried apples, vinegar, and cider. Almost all of the abandoned farm sites on North Manitou Island are marked by fruit trees. Substantial relict orchards exist on the former farmsteads of Lars Christian Alstrom/Peter Stormer, and Adam and Mary Maleski (figure 4.21). At other former farmsteads, such as

William Hopkins, Nora J. Mitchell and Alive Bojanowski, "A Taste of History," *Courier* (December 1988): 12-14.

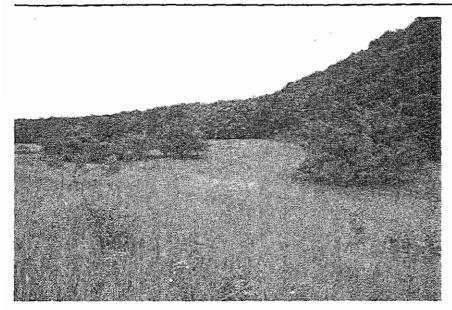


Figure 5.21. Relict apple orchard at the Alstrom/Stormer farm. Fruit trees are common remnants of previous human habitation, even at sites where few other cultural resources remain.

those of John and Anna Maleski, John L. Johnson, Hendrick Frederickson, and "Fat Annie," relict fruit trees are the most obvious evidence of the sites' agricultural history. The farm of homesteader Frederic M. Beuham, however, possesses by far the most extensive fruit orchard planted on the island by an individual entrepreneur.

Beuham's orchard is significant in the history of agriculture on North Manitou Island for several reasons. First, it was the initial attempt at large-scale commercial fruit farming on the island. Although the farm operated by Nicholas Pickard on the island during the 1860s and early 1870s also was of a grand scale, it was not developed primarily as a commercial venture. Most, if not all, of the commodities produced on Pickard's farm were consumed by the work crews and animals associated with his wood-cutting operation. For Pickard, who listed his occupation as "wood merchant" in the 1870 federal census, the main purpose of the North Manitou farm probably was to support timber extraction on the island, not to produce commodities for external markets in exchange for cash income. Although by regional standards Pickard's farm was large, it was essentially a subsistence operation. In contrast, it is likely that Frederic Beuham intended to develop a commercial farm on the island from the very beginning. Soon after filing his homestead application, Beuham established 500 fruit trees and vines on the property. This planting represents a much larger orchard than would be required for the subsistence of a single man, and much larger than the local island market would have sustained, especially when one considers that many island settlers probably had their own fruit trees. The scale and character of Beuham's planting suggests that he hoped to ship large quantities of fruit from the island to external markets. He probably hoped to take advantage of steamship traffic through the Manitou Passage to transport his crops to urban markets such as Chicago or Milwaukee.

Beuham's farm also represents another significant characteristic of commercial agriculture: a tendency toward specialization. The commodities produced by subsistence agriculture are characteristically diverse because the family depends directly upon them for its survival. Such diversified production strategies minimize risk: if one crop fails during a particular growing season, yields of other crops may offset the shortfall. Although riskier, a commercial operation typically focuses production on only one or two commodities, which allow the farmer to take advantage of economies of scale. When yields of a particular commodity are large enough, it becomes economically feasible to transport the crop to more distant markets. If the venture is successful, the cash income obtained from those markets justifies the greater production and transportation costs associated with commercial agriculture. Market-based, commercial agriculture is financially riskier and requires greater capital outlay. Such operations tend to invest more heavily in capital improvements and new technologies in an effort to increase production, thereby maximizing profits.

Frederic Beuham's orchard exemplifies these characteristics of commercial agriculture, and hence signals the beginning of a new phase in the island's history. As a dealer in fruit trees, he likely was familiar with the latest developments in new plant cultivars and scientific orchard management. It is clear that Beuham never intended to reside on his North Manitou farm year-round. The fruit plantation represented a substantial capital investment. However, he probably viewed his island orchard primarily as a production facility—a business venture rather than a home. Unfortunately, lacking the 1890 federal agricultural census records, the productivity of Beuham's young orchard probably will remain unknown. However, it must have been sufficiently profitable to encourage him to expand the orchard significantly by contracting with the Stark Brothers nursery firm in 1894.

Beuham set a precedent for subsequent agricultural developments on North Manitou. He began developing his orchard when subsistence farming was, perhaps, at its peak on the island. While general, subsistence farming declined during the 1890s and early 1900s, Beuham's venture proved the feasibility of large-scale fruit cultivation on the island. Like Beuham, the property's subsequent owners, Benjamin and Franklin Newhall, were absentee landlords, a situation that later characterized agricultural production on North Manitou during the twentieth century. The Newhalls' successor, the Manitou Island Syndicate, continued fruit production and later, as the Manitou Island Association, made fruit production the focus of its farming operation. Commercial production of cherries and apples was the principal agricultural activity on North Manitou Island during the twentieth century.

Today the property consists of a clearing that is about 160 acres in extent. No structures remain on the property, nor is it

obvious where structures formerly stood. The precise location of the buildings built by Frederic Beuham is unknown. Due to the temporary nature of these structures, it is plausible that they were removed by Beuham or by the orchard's subsequent owners, none of whom intended to reside at the site. A substantial fruit storage barn, perhaps constructed by the Newhalls, may have been removed later by the Manitou Island Association, or the by Angell Foundation after apple harvesting ceased.

Some of the orchard plantings occupying the southern portion of the site were removed by the Manitou Island Association sometime after 1938. Using a 1938 U.S. Department of Agriculture aerial photograph as a basis for comparison, the remainder of the site appears to retain a moderate level of integrity. Perhaps as many as 700-1,000 living apple trees remain in the orchard (figure 5.22). Many of the trees in the southern, lowland portion of the site have died. Nevertheless, their physical remains preserve the rhythm and spacing of the original planting design, and visually suggest the past appearance of the historic landscape. In the upland portion of the site, many of the trees appear to be in good condition; however, invasion by rose shrubs and other woody species is beginning to obscure the grid-like planting pattern of the orchard. The large caliper sizes of some trees in this area suggest the possibility that they may date from the late nineteenth century, perhaps even from Frederic Beuham's initial planting during the 1880s. The historical integrity of the entire landscape is not high, but it does retain its spatial character and enough evidence of historic land use, vegetation, and planting patterns to represent the history of commercial orcharding at the site.

The Beuham orchard appears to be eligible for inclusion in the National Register of Historic Places under criterion A, due to its vast size, its role in the history of settlement and agriculture on North Manitou Island, its association with an important fruit nursery company, and its entrepreneurial nature. The site not only marks the beginning of commercial fruit production on the island, but it also is the only landscape associated with this theme that survives with more than a low level of historical integrity. In addition, the property is the largest fruit orchard within Sleeping Bear Dunes National Lakeshore, and likely is one of the largest apple orchards found within any unit of the National Park Service system. The Beuham orchard may posses another layer of significance if any of the surviving apple trees represent rare or unknown cultivars. Hopkins et al. note that, because the NPS owns many historic landscapes, a number of which have been relatively undisturbed by modern development, the NPS system may be the "last reservoir" for many historic cultivars of plants, and thus represent a significant genetic resource.13 In addition, the American Chestnut Society considers the grove of American chestnut (Castenea dentata) trees, which is located near the southeastern edge of the Beuham clearing,

¹³ Hopkins et al., "Taste of History," 13.

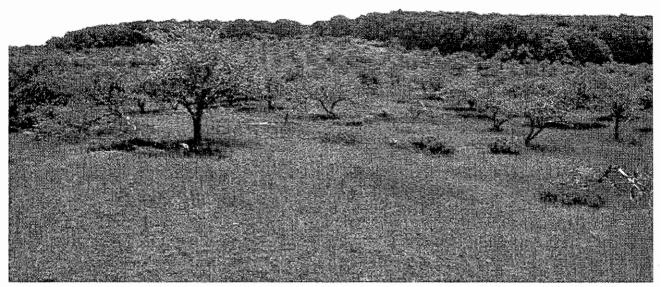


Figure 5.22. Row of apple trees,
Frederic Beuham orchard, 1996. The
Beuham orchard represents the legacy
of commercial fruit cultivation on North
Manitou Island, perhaps the most
important chapter in the island's
agricultural history. The regular rhythm
and spacing of the historic planting
design are exhibited in the pattern of
dead and living apple trees. The
landscape reflects historic patterns of
land use, vegetation, and spatial
character, and may contain rare or
historically significant apple cultivars.

to be an important botanical resource. The NPS should sponsor additional research to determine the varieties of apples present in the orchard, and the number of healthy trees.

Alvar and Mary Bournique Residence

Period of Significance: 1903-1941

NRHP Criteria: A, C

Level of Significance: Local

In 1987, National Park Service historian David L. Fritz prepared a draft NRHP nomination form for the Bournique residence. At that time, the proposed boundaries of the property encompassed a forty-acre parcel that included the house and its associated outbuildings, although the nomination considered only the house to be a contributing building. The property was considered to be NRHP-eligible under criterion C, due to the unusual design of the house.¹⁴ Current research suggests that the Bournique property should be considered additionally significant under NRHP criterion A, its association with historically important events. The Bournique property was one of the last homestead claims filed on North Manitou Island, and of all of the island homesteads, it retains the highest degree of historical integrity. In addition, the Bournique place was the largest, most extensive private summer resort developed on the island. The property thus represents additional significance in two areas: settlement and recreation.

¹⁴ This nomination was never submitted for consideration by the NRHP.

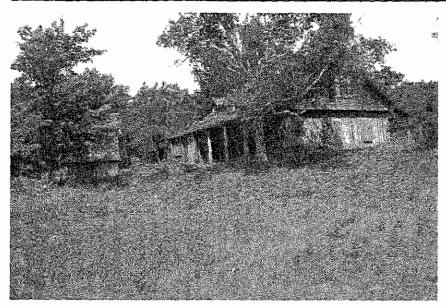


Figure 5.23. Alvar and Mary Bournique residence and ice house, 1996. The complex retains historical integrity, but it is deteriorating rapidly.

The Bournique residential complex was determined eligible for inclusion in the National Register of Historic Places during preparation of the North Manitou Island Development Concept Plan in 1987. Unfortunately, the Bournique property has deteriorated substantially during the decade that has passed since the initial NRHP nomination was drafted. The Bournique farmstead cluster retains only marginal integrity, although the historic pattern of open spaces and vegetation remains evident. With the exception of a small corn crib, however, none of the historic farm buildings remains standing. Consequently, the NRHP-eligible property should encompass only the Bournique residence and its associated outbuildings, as well as the small clearing that encloses these structures. The residential complex is substantially more intact than the farm cluster, but it, too, is deteriorating rapidly (figure 5.23). The wash house is now merely a pile of debris, and in 1997 the roof of the Bournique house appeared to be on the verge of failing. Architecturally the Bournique house is the most important structure within the complex. Its loss may mean that the entire Bournique property no longer possesses sufficient integrity for inclusion in the NRHP.

Because of its visual complexity and aesthetic richness, its relatively high level of integrity, and its remote location at the southern end of the island, far from the North Manitou Village settlement area, the Bournique place is, perhaps, the island's most valuable "discovery site." The homestead represents three of the island's most important historical themes: architecture, resort recreation and agricultural settlement.

North Manitou Island Dunes Historic District

Period of Significance: 1897-1898

Criteria: A, B

Level of Significance: National

The active dunes of North Manitou Island, along with other dune formations along the eastern and southern shores of Lake Michigan, were important research sites for Henry Chandler Cowles, one of America's pioneer ecologists. The discipline flowered during the period 1900-1920 with the publication of several important books about ecology, the establishment of the Ecological Society of America in 1915, and the founding of the journal *Ecology* in 1920. By 1920 ecology was an established academic discipline, and the first textbooks on the subject appeared in the late 1920s.

North Manitou played a key role in several early ecological studies in the upper Great Lakes. In terms of historical significance, however, none surpasses that of Henry Chandler Cowles. During the early twentieth century, Cowles became the central figure in the "Chicago School" of ecology. He was one of the most important field ecologists and educators of the period. The significance of Cowles' contributions to American ecological science has been demonstrated by several historians. Kingsland notes that Cowles' dunes research "yielded the first thorough working out of a complete successional series." The 1898-99 publication of Cowles' Lake Michigan dunes research was a pivotal event in the early development of ecological science in the United States.

Concurrent with Cowles' dunes research, Frederic Clements developed an alternate theory of succession. The Clementsian model of succession represented a simple, unified framework for conceptualizing vegetation change. In Clement's view, succession was a unidirectional, linear process that always tended toward a "climax" community, which was stable and resistant to change. Furthermore, the climax was invariably determined by climate. Clements also conceived the development of a plant community as mirroring the growth of an individual plant, the climax plant formation being analogous to "a complex organism." His theory of succession was codified in *Plant Succession: An Analysis of the Development of Vegetation*, which was published in 1916.¹⁷

In contrast to Clements, Cowles believed that succession was not a straight-line process, and a condition of equilibrium was never truly reached. Cowles also did not follow Clements' "organismic" conceptualization of plant associations and succession. However, the Clementsian view eventually prevailed, dominating the early decades of American ecology despite subsequent challenges from Henry Gleason and others. Until the 1950s, the beliefs of Clements held sway. Since the 1950s, however, thinking about succession has more closely resembled the dynamic model sketched

- ¹⁵ Donald Worster, Nature's Economy: A History of Ecological Ideas (Cambridge: Cambridge University Press, 1977); Ronald C. Tobey, Saving the Prairies: The Life Cycle of the Founding School of American Plant Ecology, 1895-1995 (Berkeley: University of California Press, 1981); Robert P. McIntosh, The Background of Ecology Concept and Theory (Cambridge, England: Cambridge University Press, 1985).
- ¹⁶ Sharon E. Kingsland, "Foundational Papers: Defining Ecology as a Science," in Leslie A. Real and James H. Brown, eds., Foundations of Ecology: Classic Papers with Commentaries (Chicago & London: University of Chicago Press in association with the Ecological Society of America, 1991), 4.
- ¹⁷ Frederic E. Clements, "Plant Succession: An Analysis of the Development of Vegetation," Carnegie Inst. Washington Publ. No. 242:1-512 (1916); Frederic E. Clements, "Nature and Structure of the Climax," Journal of Ecology 24:252-84 (1936).
- ¹⁸ Michael G. Barbour, "Ecological Fragmentation in the Fifties," in William Cronon, ed., Uncommon Ground: Toward Reinventing Nature (New York: W. W. Norton, 1995), 233-255.

by Cowles than the organismic conception advocated by Clements. Although the concept of succession has undergone considerable revision, Cowles laid a solid groundwork for one of the most central ideas in plant ecology.

Ecologists now recognize that few, if any, areas are undisturbed. The idea of a climax community has been replaced by the "climax landscape" concept, which represents a vegetation pattern that exists at a larger scale. The pathways of succession are believed to be multi-directional, possibly cyclical in some cases, and probabilistic (i.e., dependent on chance), rather than deterministic. The mechanisms driving succession are thought to involve dynamic and contingent interactions among organisms and environment, in contrast to the concept of environmentally-determined, linear development that characterized the Clementsian model. Patterns of change unfold differently at each site. McIntosh, an ecologist and a historian, summarized the "essence" of succession as being an "accumulation of organic material, change in nutrient supply and moderation of the physical environment by organisms, as well as changes in populations."19 The modern emphasis on ecosystems studies also is evident in McIntosh's statement that succession is "not a sequence of different systems, but a single system which exchanges transient species and populations through time."20

The dunes landscapes of Lake Michigan best represent the historical significance of Henry C. Cowles and his contributions to ecological science. The dunes are most directly associated with his ecological research and his theory of succession. Although the North Manitou landscapes that were studied by Cowles appear to be "natural," bearing little if any physical evidence of human use, they are nonetheless cultural landscapes of historical significance (figure 5.24). The NRHP currently includes several "natural" landscapes that are significant as historic research sites, including those associated with the Lewis and Clark expedition, an Iowa quarry significant for paleontological discoveries and theory, and test plots at a Midwestern agricultural experiment station. In each case, the boundaries of the designated landscape closely correspond with the area actually studied.²¹

The North Manitou dunes and bluffs considered for NRHP eligibility should be limited to those parts of the island studied by Cowles, and which correspond with his theory of succession. Cowles' 1898/99 article can serve as a basis for delimiting a NRHP district study area. The proposed study area for this resource should roughly follows vegetation areas mapped as "dunes and shores" and "bluffs" by Brian T. Hazlett and Robert J. Vande Kopple in 1983. Such a boundary is consistent with the description and photographs of North Manitou dunes that appeared in Cowles' paper. The boundary should encompass all of the successional zones, or "seres" described in Cowles' model of dunes succession, from beach to stabilized, forested inland dunes.

¹⁹ McIntosh, Background of Ecology, 203-204.

²⁰ McIntosh, Background of Ecology, 227.

²¹ Linda McClelland to Sherda Williams, copy of e-mail message dated 2 March 1998.

²² Brian T. Hazlett and Robert J. Vande Kopple, The Terrestrial Vegetation and Flora of North and South Manitou Islands, Steeping Bear Dunes National Lakeshore, Leelanau County, Michigan (Douglas Lake, Mich.: University of Michigan Biological Station, 1983); Henry C. Cowles, "The Ecological Relations of the Vegetation on the Sand Dunes of Lake Michigan," Botanical Gazette 27: 95-117, 167-202, 281-308, 361-391 (1899).

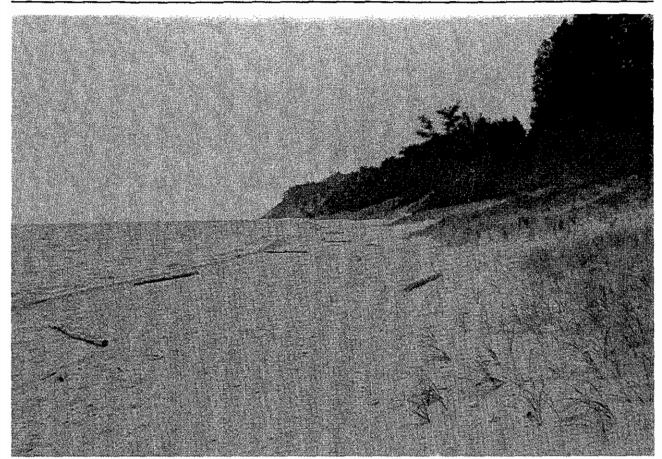


Figure 5.24. Beach and dunes along the western shore of North Manitou Island, 1996. This landscape encompasses distinctive plant and animal communities, as well as significant historical and cultural values. The dunes should be evaluated for potential inclusion in the National Register of Historic Places due to their contribution to the development of ecological science.

The historical integrity of the dunes landscape of North Manitou Island should be determined after evaluating primary sources such as Cowles' Ph.D. dissertation, his field notes, and the collection of photographs taken by him during his research on the island. Historical integrity, in this case, must be conceived in terms of both physical characteristics and processes. Certainly, the physical features that attracted Cowles to the island—the dunes and the patterns of vegetation on them—do not appear exactly as they did during the 1890s. The dunes landscape is distinguished by constant change and perpetual instability. It is, in Cowles' words, "a restless maze." 23

On-going physical processes such as soil erosion and deposition, variations in lake levels and shoreline locations, and other factors may dramatically alter the form and visual appearance of the landscape. However, it was these very processes, not just the physical features themselves, that attracted Cowles to the dunes. Cowles essentially was interested in vegetation change (i.e., succession) and its relationship to natural disturbances. Indeed, the absence of such factors in the current landscape would diminish the its historical integrity. If the dunes were to remain physically "intact" (i.e., unchanged in outward form) since the 1890s, then, according to Cowles' theory, the vegetation found there would today be completely different, probably maple-beech forest. In terms of its historical associations with Cowles' research, such a landscape

²³ Cowles, "Ecological Relations," Botanical Gazette, 194.

would lack historical integrity. It would no longer represent the theory of succession, and its cultural associations and significance would be weakened accordingly.

A more serious issue related to the landscape's historical integrity may be the impact that the non-native deer population has had on the island's dune vegetation. Hazlett and Vande Kopple have noted that several species of dune plants mentioned by Cowles, such as Juniperus communis, J. horizontalis, Arctostaphylos and Prunus pumila, are no longer present or subsist in low numbers on North Manitou Island.²⁴ A more detailed historical study is needed to assess the impact of this loss on the dune's historical integrity. Places where natural features and processes have been significantly disrupted or altered by subsequent human activity, such as the Crescent townsite, may have to be excluded from the district. Consequently, the final district may be non-contiguous.

The North Manitou dunes are a tangible, yet seldom-ac-knowledged reminder of how "natural" landscapes function as carriers of cultural meaning. The dunes inspire us to reflect upon the extent to which "natural" landscapes are culturally constructed, and blur the distinctions between nature and artifice. The "artifact" of importance at the North Manitou dunes is conceptual rather than physical: it is an idea, or theory, about nature. Yet it is even more than that. The dunes helped inspire not just a scientific theory, but a new way of looking at the landscape—a way of seeing that emphasized not only the tangible, material attributes of a scene, but also the invisible processes and systems underlying landscape change.

The entire Sleeping Bear Dunes National Lakeshore is a testament to the power of this new, "ecological" way of viewing the world. Indeed, the management of North Manitou Island as a "wilderness," with its explicit respect for the integrity of natural systems and processes, is in no small part derived from contemporary ecological thinking. What was a nascent science during the late 1890s, developed into a mature discipline with a pronounced managerial focus by the late 1960s. The dunes remind us that the material and conceptual dimensions of landscapes are bound together in a reciprocal relationship—they inspire one another in a constant, circular process of invention and reinvention. The ability to see the dunes landscape of North Manitou as both natural (existing outside of us) and cultural (known to us only as perceived through our senses and constructed in our minds) may again change the way we interpret and manage environmental change.

In a certain sense, the shoreline dunes and bluffs of North Manitou may be the most ironic, yet powerful cultural landscapes on the island. What first appear to be the most utterly "natural" places on the island, seemingly little touched by human enterprise, may in fact be landscapes of national historical significance. In a further twist of irony, the research carried out by Henry C. Cowles on the

²⁴ Hazlett and Vande Kopple, Terrestrial Vegetation, 46.

island foreshadowed subsequent management of the entire North Manitou landscape under policies based on ecological theories and principles. The current "wilderness" landscape of North Manitou Island appears ever more as a product of its own human history. It is a landscape that has been created not only by human activities, but more pervasively (and more subtly) by human ideas and myths, as reflected in the writings of William Cullen Bryant and Margaret Fuller, the promotional literature of the Angell Foundation, the physiographic ecology of Henry C. Cowles, and the rhetoric of the Wilderness Act of 1964. Farmers, loggers and recreationists certainly have left their marks on the landscape, but so too have poets, propagandists, ecologists, and professional resource managers.

密密密

NON-NRHP-ELIGIBLE PROPERTIES ON NORTH MANITOU ISLAND

Several properties related to the history of agriculture on North Manitou Island do not appear to meet the criteria for inclusion in the National Register of Historic Places. Many of these appear to have marginal historical significance and little or no historical integrity: John and Ildri Anderson Homestead Site, Nels and Sophia Carlson Homestead, John and Anna Maleski Homestead, Hendrick Frederickson Farmstead, John Swenson/Cunningham Home Site, John L. and (Wanda?) Johnson Farmstead, "Fat Annie's" Place, Peter Hanson Homestead, Lars Christopher Homestead, Nicholas Feilen Homestead, and the Gustaf Olson and Mary Olson Swan Homestead. Three sites—the Andrew Anderson Homestead, Mad and Gertrude Nerland/John and Ildri Anderson Farmstead, and the Lars Christian Alstrom/Peter Stormer Farm—possess significant historical associations, but retain little integrity.

The Andrew Anderson Homestead site is historically significant as the first farm developed on North Manitou Island under provisions of the Homestead Act of 1864. However, no significant cultural features survive from Anderson's occupation of the site; it thus fails to meet the integrity requirements for NRHP eligibility. Similar situations exist at the Adam and Mary Maleski Farm, Mads and Gertrude Nerland/John and Ildri Anderson Farmstead, and the Lars Christian Alstrom/Peter Stormer Farm. Although the Maleski family clearly played an important role in the history of agriculture on North Manitou, all of the numerous buildings that once stood on this farmstead are either nonextant or in ruinous condition. Likewise, the only structure that currently exists at the Mads and Gertrude Nerland/John and Ildri Anderson Farmstead is a severely dilapidated house. Historic patterns of land use, spatial organization, circulation, and horticultural and ornamental vegetation remain evident at both of these sites, but such relict features do not sufficiently constitute integrity of design, materials, or workmanship for the landscape as a whole.

The Lars Christian Alstrom/Peter Stormer Farm is the bestpreserved example of a logging "company farm", a distinctive type of agricultural operation that played an important role in the island's agricultural history for nearly a century. However, this property, too, exhibits only a marginal level of historical integrity—only two ruinous structures, a few apple trees, and some ornamental vegetation remain. Although the properties listed above do not appear to be eligible for inclusion in the NRHP, they may possess interpretive and aesthetic value as "discovery sites." Chapter Six

Cultural Landscape Management Recommendations



Few landscapes within Sleeping Bear Dunes National Lakeshore reveal the extent to which natural and cultural resources management are interrelated as clearly as North Manitou Island. A detailed analysis of natural resources management on North Manitou is beyond the scope of this report. Any discussion of the island landscape, however, must address the issue of natural resources management, because nature provides the basis for cultural landscapes. As stated by Sauer, "The natural landscape is ... of fundamental importance, for it supplies the materials out of which the cultural landscape is formed." Furthermore, resource managers often perceive the goals of natural and cultural resources management to be incompatible. This is especially true in the case of North Manitou Island, where documentation, evaluation, and management of cultural resources appear to have been constrained by wilderness management objectives. Nonetheless, natural processes are integral to cultural landscapes, and management and intervention in those processes are not in themselves antithetical to cultural resource management. The treatment and management of natural and cultural landscapes should be conceived in tandem.

Before describing treatment recommendations for specific cultural resources, this chapter will examine the historical and administrative contexts of resource management on the island. The first part of this chapter offers a brief administrative history of North Manitou Island. The second part places the history of resource management on the island within the context of agency-wide policies and legislated mandates, and includes a critique of some of

¹ Carl Sauer, "The Morphology of Landscape," in Land and Life: A Selection from the Writings of Carl Ortwin Sauer, ed. John Leighly (Berkeley, CA: University of California Press, 1963), 343. the assumptions underlying these strategies. The concluding section describes recommended treatment approaches for specific resources on North Manitou Island.

LANDSCAPE MANAGEMENT ON NORTH MANITOU ISLAND

Creation of Sleeping Bear Dunes National Lakeshore

Public interest in environmental conservation grew markedly during the late 1950s and throughout the 1960s. The popularity of books such as Rachel Carson's Silent Spring and Aldo Leopold's A Sand County Almanac during this period reflected intense public concern for the degrading effects that modern technology and development were having on non-human nature. Leopold, in particular, made an eloquent plea for the conservation of wild areas, and even identified shorelines as especially endangered wilderness habitats. "One of the fastest-shrinking categories of wilderness is coastlines," wrote Leopold in A Sand County Almanac. "No single kind of wilderness is more intimately interwoven with history, and none nearer the point of complete disappearance."²

Among other factors, interest in protecting endangered wild areas, such as those evoked by Leopold, inspired the expansion of the National Park Service (NPS) during the 1960s and early 1970s. During the 1950s, administrators recognized that the agency needed to increase the environmental diversity of the national park system, achieve better geographic distribution, and improve recreation opportunities in areas located proximate to metropolitan centers. One result of the interest in protecting natural and recreational lands along shorelines was a study of the Great Lakes region undertaken during the late 1950s. When the study was initiated, the only significant NPS unit in the Great Lakes region was Isle Royale National Park in Lake Superior. The NPS study focused on the Great Lakes as recreation resources, and evaluated sites for potential national park designation relative to their proximity to large population centers, and the presence of outstanding natural features. The project culminated in a report published in 1960, Our Fourth Coast: Great Lakes Shoreline Recreation Area Survey.3

Among many recommendations, Our Fourth Coast recommended the consideration of five areas with 118 miles of shoreline for possible inclusion in the NPS system. Sleeping Bear Dunes, one

² Aldo Leopold, A Sand County Almanac; with Essays on Conservation from Round River (New York: Ballantine Books, 1966), 266-267.

³ Department of the Interior, National Park Service, Our Fourth Coast: Great Lakes Shoreline Recreation Area Survey (Washington, D.C.: U.S. Department of the Interior, National Park Service, 1960).

of the five areas endorsed by the report, was described as "one of the outstanding recreation and natural areas on the Great Lakes," a landscape of "... magnificent dunes, combined with the forest-covered Empire Dunes, the miles of excellent sand beaches, the old beach lines and pine and oak forests of the Platte Plains, the giant cedars, dunes and gull colony of South Manitou Island, the bogs, marches, lakes and streams of the area and the variety of birds and wildlife ..."

After more than a decade of study, Congress authorized the establishment of Sleeping Bear Dunes National Lakeshore on 21 October 1970. The legislation created a 71,000-acre preserve along the northeastern shore of Lake Michigan to protect:

... certain outstanding natural features, including forests, beaches, dune formations, and ancient glacial phenomena ... along the mainland shore of Lake Michigan and on certain nearby islands in Benzie and Leelanau Counties, Michigan ... ⁵

The 1970 legislation stated that such features "ought to be preserved in their natural setting and protected from developments and uses which would destroy the scenic beauty and natural character of the area ... for the benefit, inspiration, education, recreation, and enjoyment of the public ..."6 The recreational emphasis of the legislation reflected the perspective of the study from which it grew. While protection of natural features was a primary goal of the national lakeshore, accommodating recreation also was a prime component of the management mandate. Establishment of Sleeping Bear Dunes National Lakeshore thus reflected the dual purposes of the National Park Service as defined in the Organic Act of 25 August 1916, which directs the agency to "conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such a manner and by such means as will leave them unimpaired for the enjoyment of future generations."7

Consistent with the larger NPS mission, the Sleeping Bear Dunes act contained provisions for specific types of active recreation, such as hunting and fishing, and instructed the NPS to provide "scenic overlooks for public enjoyment and interpretation of the national lakeshore and related features." The Act instructed the National Park Service to prepare a "land use and water use management plan" to contain, among other items, specific provisions for "protection of scenic, scientific, and historic features contributing to public enjoyment" of the lakeshore. In addition, within four years the Secretary of the Interior was instructed to report to the president on the suitability of areas for wilderness or potential wilderness designation. The agency's subsequent efforts to identify and protect wilderness areas have profoundly influenced both natural and cultural resources management within the lakeshore.

⁴ Ibid., 13.

⁵ Sleeping Bear Dunes National Lakeshore, U.S. Code, vol. 4, sec. 460x-1 (1970).

⁶ Ibid.

⁷ National Park Service, U.S. Code, vol. 4, title 16, sec. 1 (1970).

Sleeping Bear Dunes National Lakeshore, U.S. Code, vol. 4, sec. 460x (1970). The last mandate noted above was in accordance with the requirements of the Wilderness Act of 1964.

Early National Park Service Planning

The NPS complied with the administrative mandates contained in the enabling legislation by producing a Wilderness Study in 1974, a Wilderness Recommendation in 1975, and a Scenic Road Study in 1977. An initial master plan, which had been prepared before Sleeping Bear Dunes was officially established in 1970, defined areas within the lakeshore that merited consideration as potential wilderness. The 1974 wilderness study was based on the recommendations in that plan. After a public hearing, the wilderness proposal was revised and finalized in 1975, in accordance with NPS "Departmental Guidelines for Wilderness Proposals," which had been developed to ensure agency-wide compliance with the Wilderness Act of 1964.9 The 1975 recommendation concluded that none of the lands of Sleeping Bear Dunes National Lakeshore was eligible for designation as wilderness. However, the report stated that "nearly all of North and South Manitou Islands and four areas on the mainland will qualify for wilderness designation if and when they become federal lands and nonconforming uses are terminated." On North Manitou Island, the 1975 "potential wilderness" recommendation encompassed 14,400 acres, excluding 52 acres for the future development of visitor facilities.10

In 1977 the NPS determined that the initial master plan developed for the lakeshore was obsolete because most of the land within the lakeshore boundaries had been acquired and because "more was known about the area's resources, and the public's perception of the national lakeshore's role in the region had changed." Consequently, the agency began preparing a new general management plan (GMP) for the lakeshore, a process that was completed in 1979. The GMP set the course for all future planning and development activities within the lakeshore. The plan was organized into four topical sections: visitor use, natural and cultural resources management, management zoning, and general development. The management zoning and general developments of the GMP were presented in maps.

Although North Manitou Island had not been acquired by the National Park Service, its future development and management was integrated into the GMP planning process. The island played a prominent role in the GMP's visitor use concept, which distinguished between two basic types of visitor experiences: isolated, seasonal use, and more diverse, intensive uses focused on year-round interpretive and recreational facilities. Development of the Manitou islands was oriented toward the "seasonal use" end of the continuum. As summarized in the GMP:

The islands will be managed as isolated, seasonal use areas, with access by boat (the islands are inaccessible December through March); hiking will be the primary means of exploring and discovering their resources; and

Department of the Interior, National Park Service, "Departmental Guidelines for Wilderness Proposals" 24 June 1972.

¹⁰ Department of the Interior, National Park Service, Final Wilderness Recommendation: Sleeping Bear Dunes National Lakeshore, Michigan (Empire, Mich.: Sleeping Bear Dunes National Lakeshore, September 1975), 1, 12, 31.

¹¹ Department of the Interior, National Park Service, General Management Plan: Sleeping Bear Dunes National Lakeshore, Michigan (Denver: Department of the Interior, National Park Service, October 1979), 1.

solitude, remoteness, and self-reliance will be the principal elements of the visitor experience.¹²

The Sleeping Bear Dunes GMP assumed that most visitors would be attracted to the lakeshore primarily by its recreational resources. Visitors would come "to camp, climb the dunes, hike and ski the trails, boat and fish, and drive through the picturesque countryside to scenic overlooks."¹³ In accordance with the presumed recreational focus of park visitors, the NPS proposed a program based on broad interpretive concepts such as "the glacial origins of the land and lakes." ¹⁴ Beyond a general focus on geologic history, the interpretive program was to emphasize the interlinkage of natural and human history:

Natural history and human history are inseparable parts of the interpretive story: The story of the many landforms and natural environments, which combine to make a scenically diverse and interesting terrain, are complemented by the history of settlement and the use of the land and water. Together these elements make up a story of human adaptation to and influence on the natural environment.... The linking of past, present and future should be stressed ... 15

Counter to this interpretive approach, and in contrast to other areas of the lakeshore, the interpretive program for North Manitou Island was to be much more subdued and substantially limited in scope. The GMP stated:

The primitive character of this island—its inaccessibility, lack of development, and relatively large size (14,753 acres)—will be emphasized. Essential aspects of the visitor experience will be a high degree of solitude, a feeling of self-reliance, and a sense of exploration.... Limited orientation and interpretive aids will be provided to encourage a different type of experience for visitors, one that will be based on an individual's skills at getting around.¹⁶

The GMP proposed little development on the island, which was to encompass only a minimal trail system, a docking facility at the village, and adaptive use of the life saving station for basic administrative functions.

On nearby South Manitou Island, "a sense of discovery and a feeling of solitude" also was intended to be "integral to the visitor experience." In contrast to the situation on North Manitou Island, however, South Manitou was thought to possess "well-preserved examples of man's [sic] former presence that have withstood the forces of nature." On South Manitou, such "examples of man's former presence" were thought to enhance the overall visitor experience, and justified an interpretive program that was somewhat more intensive. The development of interpretive aids was considered appropriate on South Manitou Island, where "the sense of

¹² Ibid., 3.

¹³ Ibid., 5.

¹⁴ Ibid., 6.

¹⁵ Ibid., 5.

¹⁶ Ibid., 7.

exploration should increase as visitors move inland through the fallow farmlands."

While much of South Manitou also was designated as "potential wilderness," the GMP excluded a corridor through the wilderness areas for public transportation. The plan proposed a museum to interpret the history of fishing, logging, and agriculture on the island, a public transportation system using horse-drawn wagons, a conducted tout, and reuse of existing farm structures for NPS seasonal housing. The GMP called for some of the former agricultural fields on South Manitou Island to be maintained, a management approach that was more akin to proposals for certain areas on the mainland. The control of the mainland.

During the GMP planning process the NPS also reviewed the 1975 Wilderness Recommendation, and consequently determined that one of the five areas originally recommended for "potential wilderness" was unsuitable due to its small area, nearby activities, and potential use. The GMP recommended that the 1975 Wilderness Recommendation be updated and submitted to Congress. Accordingly, a revised wilderness recommendation for the lakeshore was finalized in 1981. Among other changes, the 1981 Wilderness Recommendation increased the area of "potential wilderness" on North Manitou Island to 14,726 acres. Whereas the 1975 recommendation had proposed a 52-acre wilderness exclusion, the revised 1981 recommendation stated that 27 acres would be "sufficient for a docking facility, limited [visitor] orientation, and interpretive aids."19 This change was consistent with the "primitive character" and "lack of development" that the General Management Plan emphasized in regard to North Manitou Island. Likewise, the potential wilderness area on South Manitou Island was manipulated to achieve the intended visitor experience of "a sense of discovery and a feeling of solitude" amidst "well-preserved examples of man's former presence" in the landscape. Until Congress formally acted on the revised recommendation, however, all potential wilderness areas in the lakeshore were to be managed as designated wilderness.

During its public review period, the revised wilderness recommendation received support from many regional and state conservation organizations. Most groups, like the Mackinac Chapter of the Sierra Club, supported the NPS proposal to maintain the lakeshore's wilderness areas, including the islands, in a "wild and natural state." In her comments, the chapter's field representative added that "we also recognize the unique cultural and historical features such as the village on South Manitou Island and the various maritime and agricultural sites within the Lakeshore. Preservation and interpretation of these features in a manner which is non-commercial and has minimal impact on surrounding natural features is appropriate." Preservation of South Manitou Island's cultural resources also garnered support from the Benzie Audubon Club, and

17 Ibid., 7-8.

¹⁸ Ibid., 11, 13. Although the majority of agricultural lands on the mainland were slated to be "returned to a natural condition and managed in accordance with National Park Service wilderness policies," the "interesting farmsteads and pastoral scenes" of certain districts were to be maintained "to enhance the scenic driving opportunities and to allow for the interpretation of agricultural practices."

19 Department of the Interior, National Park Service, Wilderness Recommendation: Sleeping Bear Dunes National Lakeshore (Empire, Mich. Sleeping Bear Dunes National Lakeshore, January 1981), 8. Most of the reduction in the wilderness exclusion acreage was achieved because the 1975 had considered a group campground facility to be part of the future development on North Manitou Island. By the time the GMP was completed in 1979, this campground facility was no longer considered necessary or desirable.

²⁰ Jane E. Elder, Field Representative, Sierra Club, Mackinac Chapter, to Superintendent, Sleeping Bear Dunes National Lakeshore, 13 September 1979, in National Park Service, Wilderness Recommendation, January 1981, 123-124. the Michigan United Conservation Clubs (MUCC), which characterized the island as "a storehouse of Michigan's history, from the tiny village of South Manitou on its eastern shore to the now abandoned farms located in the interior." On South Manitou, the MUCC supported a "balance between interpretation and wilderness experience."

The North Manitou Island recommendations inspired considerably less attention from reviewers. The MUCC objected to the proposed NPS wilderness management philosophy, instead calling for the island to be managed as "semi-wilderness." The MUCC advocated greater manipulation of island wildlife populations in order to preserve it as "a truly wild place" open to sportsmen for hunting and fishing. However, conservation organizations generally supported wilderness management for all but 27 acres of the island. In a more general comment, the Detroit Audubon Society suggested that "man-made [sic] structures ... be permitted to deteriorate rather than be removed unless they represent an attractive nuisance or potential hazard to park visitors ..." With this notable exception, "examples of man's former presence" on North Manitou Island, went largely ignored by commentors.

The Wilderness Recommendation finalized by the NPS in 1981 consisted of five potential wilderness units totaling approximately 24,000 acres. North Manitou Island was the largest unit within the lakeshore, followed by the 4,186-acre Otter Creek unit.²² The U.S. House Subcommittee on Public Lands and National Parks reviewed the entire Sleeping Bear Dunes wilderness recommendation in 1982. Later that year the subcommittee accepted the Wilderness Recommendation and incorporated it into an amendment to the Sleeping Bear Dunes National Lakeshore Act.23 Although Congress did not formally act upon the 1981 Wilderness Recommendation, the amendment stipulated that the areas described in the 1981 report were to be maintained in their "presently existing wilderness character and potential for inclusion in the National Wilderness System," until Congress determined otherwise.24 Two years later, the NPS assumed management of North Manitou Island in accordance with this congressional mandate.25

Development and Interpretation Concepts for North Manitou Island

Shortly after taking possession of North Manitou Island, the National Park Service began developing specific development and interpretive plans for the island. National Park Service historian David L. Fritz compiled a "History Data Report" for the island in 1987, the same year that the NPS completed a draft Development Concept Plan/Interpretive Prospectus (DCP/IP) for North Manitou. The DCP/IP described in greater detail the facilities, trail system disposition of buildings, campsite management, and wilderness boundaries outlined

²¹ National Park Service, Wilderness
Recommendation, January 1981, 117;
Raymond Rustem, Northern Michigan
Field Representative, Michigan United
Conservation Clubs, to Superintendent,
Sleeping Bear Dunes National
Lakeshore, 12 December 1978, in
National Park Service, Wilderness
Recommendation, January 1981, 127-129.

²² National Park Service, Wilderness Recommendation, January 1981. On South Manitou Island, 145 acres were excluded from wilderness designation.

²⁵ Sleeping Bear Dunes National Lakeshore, U.S. Code, vol. 4, title 16, sec. 460x-15 (1982).

²⁴ Ibid.

²⁵ The last major land holders on North and South Manitou Islands sold their properties to the National Park Service in 1984. There remained one private, "seasonal residential retention" on each island.

in the lakeshore's GMP. The DCP/IP also included more-detailed descriptions of the island's resources.

As part of previous planning efforts, the NPS had completed an inventory of structures and buildings on North Manitou Island in 1979. This survey data, along with the "History Data Report" prepared by David L. Fritz, served as the basis for evaluating the historical significance of cultural resources on the island. As reflected in the DCP/IP, however, the fate of most of these resources appeared to be predetermined by the 1981 Wilderness Recommendation. The NPS viewed the congressionally-mandated wilderness management of all but 27 acres of the island as "significantly limiting the options for historic structures management."26 Such a constraint seemed unimportant, however, because the island's history was viewed as unremarkable, and inconsequential in its imprint on the landscape. "Except for previous logging and some agricultural use," remarked the DCP/IP in a self-contradictory statement, "North Manitou Island is predominantly undisturbed, with an extensive beech/maple forest, wave-cut and shoreline bluffs, perched dunes, lakes, cedar trees, and an introduced whitetailed deer population."27

Comparison with South Manitou Island served as a primary basis for justifying the North Manitou development and interpretive concept outlined in the DCP/IP:

The natural and cultural resources and history story are largely similar on North and South Manitou islands. Rather than provide similar experiences on both islands, the GMP emphasizes interpretive and day use activities on South Manitou Island and primitive overnight use on North Manitou Island.²⁸

Most certainly, this statement neither reflected the chronicle of human history presented in David L. Fritz's "History Data Report," nor did it acknowledge that the GMP's North Manitou Island interpretive concept was generated several years before Fritz's report had been written. Instead, the DCP/IP uncritically reiterated the GMP's visitor use concept for North Manitou Island, of "a primitive experience emphasizing solitude, a feeling of self-reliance, and a sense of exploration." No on-site interpretive center was proposed, and no more than three wayside exhibits were to be installed on the island. Minimal interpretation was to be offered through publications that would provide backcountry etiquette and safety information, and a more comprehensive guide to include "interpretation of natural history and some mention of the island's human history."29 Only the buildings of the lifesaving station, the sawmill, and the village barn—all of which were considered both historically significant and useful—were to be preserved. The plan considered the other structures on the island to be "visual intrusions," and called for them to "deteriorate naturally," or to be removed.30

²⁶ Department of the Interior, National Park Service, Development Concept Plan/ Interpretive Prospectus, North Manitou Island, Sleeping Bear Dunes National Lakeshore, Michigan (Empire, Mich. Sleeping Bear Dunes National Lakeshore, 5 November 1987), 2.

²⁷ Ibid., 7.

²⁸ Ibid., 20.

²⁹ Ibid.

³⁰ Ibid., 30.

During preparation of the North Manitou Island DCP/IP, the National Park Service determined that six properties appeared to be eligible for inclusion in the National Register of Historic Places: the lifesaving station complex; the Katie Shepard summer hotel and cottage; the MIA sawmill; the MIA village barn; the MIA west-side barn, and the Bournique place. The treatments of removal or neglect proposed in the DCP/IP for the Katie Shepard Hotel, MIA west-side barn, and the Bournique Place clearly conflicted with the U.S. Secretary of the Interior's Standards for Historic Preservation Projects. Consequently, the NPS consulted with the Michigan State Historic Preservation Officer and the Advisory Council on Historic Preservation. They developed a Programmatic Memorandum of Agreement (PMOA) that fulfilled the agency's legal requirement under the NHPA, and allowed the structures to become moldering ruins after they were documented according to Historic American Buildings Survey (HABS) guidelines. The PMOA was executed in July 1987.31

The North Manitou Island DCP/IP was presented for public review in 1987, along with similar plans for Glen Haven on the mainland. The Glen Haven proposals attracted considerable public interest, whereas the North Manitou plan drew comparably fewer comments. Rita Hadra Rusco, who arguably knew the North Manitou landscape and its history better than any other constituent, advocated preservation and interpretation of the island's cultural resources. Rusco protested the overt neglect of human history on North Manitou Island, and instead recommended a guided vehicle tour, similar to that intended for South Manitou Island. Rusco suggested that the interpretive tour should extend along a "historic corridor" from the village to the island cemetery, the Bournique place, Nerland/Anderson house, the Alstrom homestead, and the west-side location of Crescent.32 More typical, however, were the comments of the Mackinac Chapter of the Sierra Club, which supported the draft DCP/IP and urged the National Park Service to quickly implement wilderness management techniques on the island.33 The DCP/IP for North Manitou Island was formally approved by the NPS in November 1987.

Although the NPS had been implementing wilderness management techniques since it assumed control of the island in 1984, strict enforcement of these restrictions did not begin until 1987.³⁴ Thereafter, management of the island's resources has remained consistent with techniques mandated in Chapter 6, "Wilderness Preservation and Management," in NPS Management Policies (1988). In accordance with NPS policies, management techniques in wilderness areas must comply with the "minimum tool" principle, which dictates that only minimal interventions may be undertaken, and these must be implemented by the least intrusive method, regardless of whether or not it is the most economical method.³⁵ For example, the use of mechanized equipment in the potential wilderness area of North

31 Ibid., 28-29. Since they initially were developed in 1976, the "U.S. Secretary of the Interior's Standards for Historic Preservation Projects" have constituted the primary code of professional ethics and working principles for preservation activities in the United States. In 1992 the standards were revised and re-titled "The Secretary of the Interior's Standards for the Treatment of Historic Properties."

³² Rita Hadra Rusco to Superintendent, Sleeping Bear Dunes National Lakeshore, 23 June 1987, in Department of the Interior, National Park Service, "Public Response Report for the Draft North Manitou Island Development Concept Plan and the Draft Glen Haven development Concept Plan/Interpretive Prospectus/Environmental Assessment, Sleeping Bear Dunes National Lakeshore" (Denver: National Park Service, September 1987), n.p.

33 Ann Wiowode, Mackinac Chapter, Sierra Club, to Superintendent, Sleeping Bear Dunes National Lakeshore, 21 July 1987, in National Park Service, "Public Response Report," n.p.

³⁴ Acting Director, National Park Service, "Notice: Sleeping Bear Dunes National Lakeshore, Implementation of Wilderness Management," signed 11 March 1987, on file at Sleeping Bear Dunes National Lakeshore, Empire, Mich. Implementation of wilderness management techniques on South Manitou Island began in 1982.

³⁵ Department of the Interior, National Park Service, Management Policies:
Management of the National Park System (Washington, D.C.: U.S. Department of the Interior, National Park Service, 1988), 6:4-5.

Manitou is prohibited, "except as necessary to meet minimum National Park Service administrative requirements and/or emergency situations." ³⁶ Administrative facilities are likewise limited to the "types and minimum number essential to preserve wilderness character or values or essential to ensure public safety." ³⁷

The year 1994 represents an important turning point in the history of the cultural resources management on North Manitou Island. An NPS proposal to install a photovoltaic (PV) array on the island sparked controversy about the design and location of such a facility, and refocused public attention on the island's cultural resources. After considering additional historical information, the Michigan State Historic Preservation Officer determined that the buildings comprising the MIA farm complex and Cottage Row appeared be eligible for inclusion in the National Register of Historic Places. Also in 1994, a reevaluation of the U.S. Life Saving Service (USLSS) complex occurred when historical research determined that the beach cart house on North Manitou Island was an 1854 volunteer rescue station—a nationally significant resource. The USLSS complex was determined to be eligible for designation as a National Historic Landmark.

As noted in the North Manitou DCP/IP, strict interpretation of, and adherence to, NPS wilderness management policies would seem to "significantly limit" the treatment options for cultural resources on the island. However, it is important to recognize that such limitations, whether they be statutory or conceptual, are artifacts of the presumed opposition of wilderness and cultural landscapes. Such limitations thus reflect a fundamental assumption of NPS management philosophy: the disjuncture of human and non-human nature. "Limitations" are a consequence of this disjuncture, and are accordingly manifest in both wilderness and cultural landscape management strategies. Indeed, depending on the context, cultural landscape management techniques may be every bit as "limiting" when in reference to wilderness management options. The following sections explore these issues further.

麥麥麥

³⁶ Acting Director, "Notice: ... Implementation of Wilderness Management."

³⁷ National Park Service, Management Policies, 6:5.

Michigan State Historic Preservation Officer to Regional Historian, Midwest Region, National Park Service, 7 October 1994, SLBE; Michigan State Historic Preservation Officer to Superintendent, Sleeping Bear Dunes National Lakeshore, 1 December 1994, SLBE.

NPS CULTURAL LANDSCAPES MANAGEMENT

Statutory and Policy Framework

In 1966, Congress enacted the National Historic Preservation Act (NHPA), which established most of the nation's federal preservation programs and policies. Passage of the NHPA was, in part, a reaction to widespread loss and destruction of historic sites across the United States. Most current National Park Service policies for managing cultural resources stem from mandates contained in the NHPA of 1966, and as revised by subsequent amendments. The keystone of federal cultural resources management policies is the National Register of Historic Places (NRHP) program, which was described in Chapter Five. The NRHP provides managers with a framework for identifying and evaluating significant cultural properties. Once identified, the treatment of resources is guided by approaches established by the U.S. Secretary of the Interior, as mandated by the NHPA of 1966, as amended.³⁹

First published in 1976, the Secretary of the Interior's professional standards for historic preservation projects have been utilized extensively for public and private sector preservation activities throughout the country. In 1992 the standards were revised and republished as the "Secretary of the Interior's Standards for the Treatment of Historic Properties." The standards are organized according to four levels of treatment—preservation, rehabilitation, restoration, and reconstruction. Each treatment approach is designed to be applicable to all of the various types of historic properties recognized by the National Register of Historic Places: buildings, structures, sites, objects, districts, and landscapes.

Cultural Resources Management: Conventions of Interpretation and Practice

Of the four treatment levels defined by the Secretary of the Interior, "preservation" is the most conservative approach, emphasizing the retention of the greatest amount of historic material. Properties that retain an exceptionally high degree of historical integrity are often assigned this level of treatment. A "preservation" treatment also may be applied when there is insufficient documentation to support restoration or reconstruction, or when more intensive treatments would damage the integrity of the resource or diminish its interpretive value. Today, restoration and reconstruction typically are undertaken only when extensive documentation of the resource's past form exists, and when the replacement of missing elements or the loss of features from other periods in the property's history is absolutely essential to interpreting the historical significance of the property. Rehabilitation, a treatment that occupies a middle ground between preservation and restoration, is probably the most common treatment approach. Rehabilitation allows the retention (and in some cases,

³⁹ National Historic Preservation Act of 1966, U.S. Code, vol. 4, title 16, sec. 470 (1970).

Four Levels of Treatment for Historic Properties

Preservation — the act or process of applying measures necessary to sustain the existing form, integrify, and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction. New exterior additions are not within the scope of this treatment; however, the limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a preservation project.

Rehabilitation — the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values.

Restoration — the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period. The limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a restoration project.

Reconstruction — the act or process of depicting, by means of new construction, the form, features, and detailing of a non-surviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific period of time and in its historic location.

SOURCE: Charles A. Bimbaum, ed., with Christine Capella Peters, The Secretary of the Interior's Standards for the Treatment of Historic Properties, with Guidelines for the Treatment of Cultural Landscapes (Washington, D.C.: U.S. Department of the Interior, National Park Service, 1996).

restoration) of a property's character-defining features, while making the property functional for contemporary uses. Although each treatment approach is distinctive in purpose and methods, all share an underlying goal of not arresting change altogether, but rather directing change so as to maintain continuity of a historic property's physical integrity and associative value(s). The four approaches simply differ in the manner in which they seek to manage change.

In determining an appropriate treatment for a historic resource, managers balance many factors, including a property's relative historical significance, its historical integrity and current physical condition, its geographical context, the extent and reliability of historical documentation, and the property's interpretive potential. A number of technical and functional issues also are taken into account, such as the property's use, management and maintenance requirements, accessibility constraints, health and safety considerations, environmental protection requirements, and energy efficiency. For complex resources, like cultural landscapes, a combination of more than one treatment approach may be employed. Treatment approaches may differ according to the integrity of various landscape elements, or the contemporary function of the landscape as a whole or its component landscapes. In each case, however, cultural resource managers

40 Charles A. Birnbaum, ed., with Christine Capella Peters, The Secretary of the Interior's Standards for Historic Preservation Projects with Guidelines for the Treatment of Cultural Landscapes (Washington, D.C.: U.S. Department of the Interior, National Park Service, 1996), 6-11.

must address the fundamental problem of how to best achieve a balance between continuity and change.

Treatment of cultural resources within units of the National Park Service is directed by guidelines contained in chapter 5 of NPS Management Policies (1988) and NPS-28, Cultural Resource Management Guideline, Release No. 4, 1994, National Park Service. In striking a sustainable equilibrium between historical continuity and change, one of the key issues that cultural landscape managers must consider is the role played by natural processes. Although such considerations typically are associated with "natural resources management," maintaining the functional integrity of natural systems and protecting natural resources from degradation or loss are important factors in cultural landscape management, as well.



NPS WILDERNESS MANAGEMENT

Statutory and Policy Framework

In the United States, one of the most important accomplishments in the realm of environmental conservation was enactment of the Wilderness Act of 1964. The intent of the Wilderness Act was to "assure that an increasing population, accompanied by expanding settlement and growing mechanization, does not occupy and modify all areas within the United States and its possessions, leaving no lands designated for preservation and protection in their natural condition." To accomplish this end, the Act established a National Wilderness Preservation System, which was to consist of federally-owned areas that were designated by Congress as "wilderness areas." Among other criteria, wilderness areas were required to be roadless areas of at least five thousand contiguous acres. The Act instructed the Secretary of the Interior to review all such areas within the NPS system and report to the President on the suitability for preservation as wilderness.

⁴¹ National Park Service, Management Policies, 5:1-15; Department of the Interior, National Park Service, NPS-28, Cultural Resource Management Guideline, Release No. 4 (Washington, D.C.: U.S. Department of the Interior, National Park Service, 1994).

⁴² Wilderness Act of 1964, U.S. Code, vol. 4, title 16, sec. 1131(a) (1970).

⁴³ Ibid., secs. 1131(c), 1132(c).

Treatment of wilderness areas in the national park system is currently guided by Chapter 6 of the NPS Management Policies (1988) and by directives such as NPS-77: Natural Resources Management Guideline (1991), which interpret the management and accountability mandates imposed by the 1964 Wilderness Act. The NPS Management Policies "constitutes the basic Servicewide policy document and, as such provides the overall foundation for management actions within the Service." The NPS guidelines are intended to provide more detailed interpretation of the management policies, and to help NPS managers "implement policy consistently on a Servicewide basis." 44

National park units typically are divided into distinct, standardized management districts that relate to the predominant or most highly-valued character of a particular area, e.g., natural, cultural, or special use zones. In natural zones, "the primary objective of management is to protect the natural resources and values in as natural a condition as possible, while allowing for their enjoyment by current generations and ensuring their availability for future generations." To this end, natural resources management may "maintain, restore, and perpetuate" the "inherent integrity" of natural environments "which are evolving through natural processes minimally influenced by humans."45 The NPS defines "natural resources" to include physical elements such as "native plants and animals, water, air, soils, topographic features, geologic features, paleontologic resources," and also less tangible qualities as "natural quiet, and clear night skies." NPS management policies further define "natural conditions" to mean "those that would have existed today in the absence of the effects of European man [sic]."46

The NPS partitions natural resource management into six major activities: (1) research; (2) mitigation of potential and realized adverse effects of humans (which encompasses preservation and restoration activities); (3) monitoring; (4) protection; (5) interpretation, and (6) administration. The current NPS-77: Natural Resources Management Guideline notes that wilderness generally occurs in areas designated, for management purposes, as "natural" zones, although limited acreage may exist in cultural or special use zones.⁴⁷ NPS management emphasizes the "scientific value" of wilderness areas, which presumably is derived "from their undisturbed natural condition and from the wealth of biological diversity they contain."48 Each unit of the national park system is mandated to develop a wilderness management plan, and to appoint a wilderness management coordinator who is responsible for developing and implementing the plan. The park superintendent is ultimately accountable for ensuring that the plan complies with the Wilderness Act. In addition, all plans must be reviewed and approved by the regional and Washington, D.C., offices of the NPS.49

44 Department of the Interior, National Park Service, NPS-77: Natural Resources Management Guideline (Washington, D.C.: U.S. Department of the Interior, National Park Service, 1991), 1:4. The National Park Service currently is reviewing and updating its wilderness management policies. This effort is being coordinated by the National Wilderness Steering Committee, and will result in the implementation of new agency-wide Wilderness Guidelines. A draft of the revised guidelines, which was circulated for review during summer 1997, identified cultural resources as a "critical issue," and may signal a change in direction in terms of cultural resources and wilderness management philosophy. See National Wilderness Steering Committee, "Draft NPS Wilderness Guidelines," 14 May 1997.

⁴⁵ National Park Service, NPS-77, 1:1-2.

⁴⁶ Ibid., 1:1, 3.

⁴⁷ Ibid., 4:10.

⁴⁸ Ibid., 4:10.

⁴⁹ A separate plan is not required for areas where wilderness designation is pending in Congress. In such situations the recommendation provides the management direction. This is the case at Sleeping Bear Dunes.

Wilderness Management: Conventions of Interpretation and Practice

Consideration of cultural resources, as implied in the language of the 1964 Wilderness Act and, consequently, as considered in NPS wilderness management policies, is ambiguous. The NPS wilderness management approach seems to leave little room for cultural resource preservation, stating unequivocally that "only those practices compatible with preservation of wilderness values are permissible" within wilderness areas, and allowing for the maintenance of "only those structures necessary for meeting the purposes of maintaining the enduring resource of wilderness."50 Human-made structures are permitted within wilderness areas only if they meet the "minimum tool" requirement, i.e., the "minimum necessary for health and safety" of wilderness visitors or the protection of resources. Facilities that exceed the "minimum tool" criteria are to be removed, and the site "restored to its natural state."51 The guidelines make some accommodation of "small boat docks, water guzzlers and primitive shelters," however, a specific provision for the retention of these elements must be included in the proposed legislation for the wilderness area. Landscape management practices such as controlled burning also must be specifically mentioned.⁵² The NPS Management Policies advise that if the preservation of a historic feature "would result in the imprint of man's work being substantially noticeable, ... the feature should not be included in wilderness."53

Although the guidelines recommend that areas containing significant cultural resources should not be designated as wilderness areas, the practice of designating "altered lands" (i.e., cultural landscapes) as "potential wilderness," increases the likelihood that significant cultural resources may be subjected to wilderness management policies. For management purposes, "altered lands" are defined as "lands that have been logged, farmed, grazed, or otherwise utilized in ways not involving extensive development or alteration of the landscape." Such lands may be "considered for wilderness if at the time of study the effects of these activities are substantially unnoticeable or their wilderness character could be restored through appropriate management actions."54

The primary management goal in "potential wilderness" areas is the elimination of the conditions that preclude wilderness designation. Strict adherence to this approach would seem to doom many cultural resources within wilderness and potential wilderness areas. However, the NPS Management Policies states that:

... an area that attracts visitors primarily for the enjoyment of solitude and unconfined recreation in a primitive setting may also contain historic features and still be included in wilderness. Typical historic features that may be included are archaeological sites, historic trails, travel

⁵⁰ National Park Service, NPS-77, 4:10.

⁵¹ Ibid., 4:15.

⁵² Ibid., 4:16.

⁵³ *Ibid.*, 6:2-3.

⁵⁴ Ibid., 6:2.

routes, battle sites, and minor structures. Historic trails may serve and be maintained as part of the wilderness trail system. However, if the planned scope and standard of maintenance would result in the imprint of man's work being substantially noticeable, the trail or other feature should not be included in wilderness.⁵⁵

The current policies assert that the maintenance of historic features in wilderness areas shall "comply with cultural resource protection policies," and that cultural resource protection objectives may legitimize the maintenance of an existing shelter. Furthermore, wilderness management plans, which are mandatory for all wilderness units within the NPS system, are required to contain "... measurable management objectives that address the preservation of wilderness-dependent cultural and natural resources and values ..." Most significantly, the policies state that historic resources within wilderness areas shall be "protected and maintained using methods that are consistent with the preservation of wilderness character and values and cultural resource protection requirements." 58

The content and tone of most wilderness management policies and guidelines indeed suggest that wilderness designation limits cultural resource management (CRM) in wilderness areas. As the above citations demonstrate, however, the existing policies do not outright preclude the protection and management of cultural resources within wilderness areas. A directive in the revised NPS wilderness guidelines, which currently are in draft form, provides an even stronger impetus for cultural resources management within wilderness areas:

NPS managers shall maintain an affirmative cultural resource management program in wilderness.... The cultural resource management tasks within wilderness are the same as those elsewhere, but these sites must additionally be treated in a manner sensitive to wilderness resources and character.⁵⁹

Rather than "significantly limiting" cultural resource management, the guidelines imply that preservation interventions should be limited in scope by the minimum tool principle, and that specific treatment techniques should respect wilderness values. Therefore, resource managers might strive accordingly for a compromise treatment between wilderness and cultural resource management objectives.

The extent to which cultural resource management is limited in wilderness areas may derive more from the ways in which wilderness management policies are customarily interpreted, than from the actual content of the polices themselves. Such management policies, after all, provide only guidance, and are necessarily open to interpretation as specific circumstances warrant. One might reasonably suggest, therefore, that cultural resource management within wilderness areas should take into account the significance, condi-

³⁵ Ibid., 6:2-3.

⁵⁶ Ibid., 6:5, 7.

⁵⁷ *Ibid.*, 6:4. Text italicized by authors.

⁵⁸ Ibid., 6:7.

⁵⁹ National Wilderness Steering Committee, "Draft NPS Wilderness Guidelines," 14 May 1997, 15.

tion, interpretive value, and research potential of individual cultural resources, as well as the distinctive wilderness values of the area. Certainly, management decisions should not be made before all available data about the impacted resources have been considered.

Some Ideological Dimensions of Current Management Conflicts

The fate of North Manitou Island's cultural landscapes is bound up in questions of appropriate management strategies for resources in wilderness areas. NPS wilderness management policies reflect an ambiguous, if not ambivalent or hostile, attitude toward cultural resources, or "examples of man's presence" in the landscape. At the other end of the management spectrum, the legislated mechanisms for historic preservation seem to provide little accommodation of wild nature and wilderness values. The central dilemma encountered in places like North Manitou Island is that the current institutional and legal framework for both wilderness preservation and historic preservation are predicated on landscape ideals that do not exist in reality. The 1964 Wilderness Act posits an imaginary, wild landscape that is totally free of human influence, and represents wilderness as something that exists completely outside of, and forever separate from, humanity. In contrast, the policies and regulations promulgated by the National Park Service under the National Historic Preservation Act of 1966 recognize only those parts of the world that, to borrow the terminology of the Wilderness Act, bear the "imprint of man [sic]." The conventional approach to cultural resource management has emphasized human works to an extent that leaves little room for those elements of the landscape that exist outside the human realm. Both viewpoints essentially deny that humans are part of nature.

The presumed alienation of humanity from the rest of nature is evident in the language of the 1964 Wilderness Act, whereby "natural condition" is defined in opposition to human civilization. The Act states that a wilderness area is:

... in contrast with those areas where man [sic] and his own works dominate the landscape, ... an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain.⁶⁰

As this passage demonstrate, there is a strong aesthetic basis to the Wilderness Act. An area that has been utilized or modified by humans (i.e., a cultural landscape) may be considered for wilderness designation if it "... generally appears to have been affected primarily by the forces of nature, with the imprint of man's [sic] work substantially unnoticeable ..."61 The definition thus emphasizes how a landscape is perceived by a viewer, rather than intrinsic qualities of wildness. This definition also is essentially anti-historical because it effectively denies that such landscapes have a human history. As

Wilderness Act of 1964, U.S. Code, vol. 4, title 16, sec. 1131(c) (1970).

⁶¹ Wilderness Act of 1964, U.S. Code, vol. 4, title 16, sec. 1131(c) (1970). Text italicized by authors.

noted by environmental historian William Cronon and others, the popular conception of wilderness, which is reflected in the language of the Wilderness Act, incorporates a kind of mythic timelessness, and a denial of human history.⁶²

This ahistorical quality of the wilderness definition is not just an ideological issue, for it also is incorporated into National Park Service wilderness policies. For example, NPS-77: Natural Resources Management Guideline (1991), defines "natural conditions" as "those that would have existed today in the absence of the effects of European man [sic]." Landscapes that have been utilized by Euro-Americans, according to this definition, exhibit "unnatural" conditions. In practice, such a definition essentially entails a reconceptualization of the landscape's history to exclude the activities and impacts of Euro-Americans. Thus, landscapes that were created by humans are interpreted as embodying non-human nature.

Yet the viewpoint reflected in historic preservation practice is nearly as static and, ironically, as ahistorical as that of the Wilderness Act. The objective of many cultural resource management interventions is to reverse deterioration caused by natural processes and prevent further decay. However, in preserving, restoring, or recreating the appearance of an earlier era, the passage of time and the effects of natural processes are denied. The management goal is to perpetuate the resource in a particular "historical" state for as long as possible. Taken to the extreme, resources are represented as existing in a state of timelessness, reflecting the era and cultural milieu in which they were produced, rather than the current moment. Other treatments, such as rehabilitation, allow for material alterations in order to accommodate change, but nonetheless seek to perpetuate certain physical characteristics, and remain hostile to the deteriorating processes of nature.

When one considers both of these resource management strategies, other commonalties become apparent. Enacted within only two years of each other, both acts express a pessimistic outlook on the environmental effects of human activities in a modern technological society. Both wilderness and cultural resource preservation effectively employ the "minimum impact" concept: preservation of the resource is of the utmost importance, and measures are undertaken to ensure that human actions have minimal adverse impact on the resource. Finally, both wilderness and cultural resource preservation are fundamentally concerned with the perpetuation of associative values that have a strong aesthetic dimension.

At a basic level, it must be admitted that preservation of both wilderness and historic resources serve human purposes. Although the Wilderness Act mentions "the earth and its community of life," its purpose is essentially anthropocentric. The Act implies that wilderness is a "resource" to be utilized by humans. Indeed, "wilderness areas," according to the Act, "shall be adminis-

⁶² William Cronon, "The Trouble with Wilderness," in William Cronon, ed., Uncommon Ground: Toward Reinventing Nature (New York: W. W. Norton, 1995), 76-80.

⁶³ National Park Service, NPS-77, 1:3. The basic reference for NPS policy is the agency's Management Policy (1988). The "Guidelines" provide more specific guidance relative to special management topics.

tered for the use and enjoyment of the American people in such a manner as will leave them unimpaired for future use and enjoyment as wilderness, and so as to provide for the protection of these areas, the preservation of their wilderness character, and for the gathering and dissemination of information regarding their use and enjoyment as wilderness." Wilderness areas are to possess "outstanding opportunities for solitude or a primitive and unconfined type of recreation," and may "contain ecological, geological, or other features of scientific, educational, scenic, or historical value." 65

The two approaches differ most significantly in what they define as a "resource." The National Register of Historic Places emphasizes human beings and, in a larger sense, human culture as the generator of the most highly-valued aesthetic qualities of the environment. In contrast, the Wilderness Act values non-human nature as the generator of similar, if not entirely parallel, environmental qualities. The conceptual dichotomy underlying the segregation of "cultural" and "natural" management policies masks the extent to which human and non-human systems are intertwined, and is most clearly apparent in the contrast between cultural landscape and wilderness management approaches. Cultural landscape and wilderness management philosophy essentially differ according to the ways natural and cultural systems are defined.

Both wilderness and cultural resource management policies are developed for landscapes that exist at opposing ends of a landscape continuum. Although examples may exist which nearly exemplify these two extremes, the vast majority of landscapes in the public realm exist somewhere between the two poles, and those that most nearly represent the middle of the continuum are truly problematic for landscape managers. Currently, the typical management strategy under both wilderness and cultural resources rubrics is to deny the "middleness" of such landscapes and nominally designate them as one or the other—that is, as either cultural or wilderness landscapes. Specific management techniques are then prescribed according to this nominal designation. Such an approach suggests that these middle landscapes are of lesser value than the "pure" examples that define either end of the continuum. The consequence of this strategy is that the mythical depth and the metaphorical richness of the natural and cultural worlds has been neutralized in such places.

The problem with basing landscape-level management decisions on such a bipolar conception is that neither ideal exists. Landscapes are neither completely wild, nor completely anthropogenic. Thus, in the real world, the two landscape management philosophies are unavoidably cast in opposition to one another. Wilderness management assumes human activities to be universally harmful to non-human nature, and therefore seeks to eliminate or minimize the influence of humans on natural systems. In contrast, cultural resource management considers both nature and humans to be partners in the

⁶⁴ Wilderness Act of 1964, U.S. Code, vol. 4, title 16, sec. 1131(a) (1970).

⁶⁵ Wilderness Act of 1964, U.S. Code, vol. 4, title 16, sec. 1131(c) (1970).

creation and maintenance of the landscape. Yet cultural resource management practices place utmost value on those elements that possess "significance" relative to an interpretation of the landscape's human history, and acknowledge non-human processes only when they do not conflict or interfere with that interpretation. Management interventions often seek to inhibit and minimize the effects of time and natural processes.

Current agency policies provide no clear direction for resolving apparent conflicts that arise between these two realms of landscape management philosophy, other than to suggest that one approach must take precedence over the other. For example, the NPS Management Policies for cultural resources concede that "achievement of other park purposes may sometimes conflict with and outweigh the value of cultural resource preservation." In such cases, "the resource will ... be permitted to deteriorate naturally, unless its destruction or direct removal is necessary for public safety or to eliminate an unacceptable intrusion." Such a black-or-white approach may work in landscapes that lie closer to the two ideals, but it is ill-suited to the landscapes that fall in between—the "potential wilderness" areas, the scores of "natural-looking" landscapes that are the creations of human imagination and toil.

Perhaps no category of landscapes is as suited to a compromise management strategy as "middle landscapes" such as North Manitou Island—landscapes that possess both a rich human history and spectacular qualities of non-human nature. The overlap of cultural and natural, or wilderness landscape is expressed profoundly in the forests, clearings, and dune landscapes of North Manitou Island. North Manitou could be managed and interpreted as a landscape for probing the cusp between lived human experience and the reality of the non-human world. This prospect, however, can be realized only if the island is understood as a cultural landscape, a place created and defined by human actions and ideas.

Such a shift in orientation does not call for a repeal of the island's wilderness designation, but it does imply a greater appreciation of the island's human history, and recognition of the landscape as a constructed wilderness. In fact, acknowledgment and interpretation of North Manitou Island as a cultural landscape is wholly consistent with the interpretive program that was defined for Sleeping Bear Dunes National Lakeshore nearly thirty years ago. That strategy, which stressed the interlinkage of natural and human history, was somehow lost when specific plans for North Manitou Island were developed. Perhaps now is the time to rethink the ways in which "the story of the many landforms and natural environments, which combine to make a scenically diverse and interesting terrain, are complemented by the history of settlement and the use of the land and water." And perhaps North Manitou Island is a landscape for doing just that.

⁶⁶ National Park Service, Management Policies, 5:5.

⁶⁷ National Park Service, General Management Plan, 5.

GENERAL RECOMMENDATIONS FOR RESOURCE MANAGEMENT ON NORTH MANITOU ISLAND

Effective planning entails a never-ending process of reflection, evaluation, and revision. This is especially true when the object of a plan is an entity as complex and dynamic as a landscape. Just as a landscape constantly changes in response to human and non-human influences, so too do our perceptions and understanding of that landscape. Given that the natural and cultural realms of our world are in a endless state of flux, no plan can be expected to remain potent in perpetuity, no matter how well-thought out, and no matter how small a piece of the world it encompasses. Unless a plan also changes in response to external factors, it becomes out-dated, irrelevant, useless.

The National Park Service's 1987 Development Concept Plan/Interpretive Prospectus for North Manitou Island is a document that was prepared for a landscape that was, at the time, little understood by agency planners and the public. The island was, in many ways, a terra incognita. Moreover, the concept "cultural landscape" was only beginning to gain currency among NPS planners in 1987, and had provided a basis for planning in only a couple of prototypical cases. This is not to suggest that the North Manitou DCP/IP resulted from an entirely arbitrary and flawed process. On the contrary, the DCP/IP was derived from the best available data about the island's natural and cultural resources, and it was consistent with the island's popular image as a remote wilderness landscape. However, a scheme that "fit" the predominant perception and understanding of North Manitou in 1987, seems less well-suited to the island landscape that we behold and experience today.

The current visitor experience of North Manitou Island is defined by its human history, not by abstract, arbitrarily applied concepts of wilderness. Although it is hoped, and expected, that visitors develop a greater appreciation of the beauty and intrinsic value of non-human nature on North Manitou, they inevitably experience the nature within a cultural landscape setting. Indeed, the cultural landscape provides the framework, the orientation points, the pathways, that structure visitors' encounters with nature. Once they arrive on the islands, visitors do not roam the island aimlessly. Rather, visitors inevitably structure their island adventures as time spent at, or traveling between, a series of destinations (figure 6.1).

The 1994 camping experience of journalist Mark Stone may be typical. After landing at North Manitou Village, Stone "had big ideas that first afternoon of striking out across the middle of the island to the site of an old settlement on the western shore called Crescent City." Instead, Stone set up camp at the campground near the northern edge of the village clearing, and from there "made

68 A deliberate attempt to develop an NPS resource planning process based on the cultural landscape concept began in 1980, and culminated in a manual authored by Robert Z. Melnick, with Daniel Sponn and Emma Jane Saxe, titled Cultural Landscapes: Rural Historic Districts in the National Park System (Washington, D.C.: U.S. Department of the Interior, National Park Service, 1984). This report outlined the scope and purpose of a cultural landscape report (CLR), and provided the basis for the CLR guidelines that were incorporated into NPS-28 in 1985. The first National Register of Historic Places bulletin to focus specifically on rural vernacular landscapes did not appear until 1990. See Linda Flint McClelland, J. Timothy Keller, Genevieve P. Keller, and Robert Z. Melnick, National Register Bulletin 30: Guidelines for Evaluating and Documenting Rural Historic Landscapes (Washington, D.C.: U.S. Department of the Interior, National Park Service, 1990). Some of the early attempts to apply the Melnick et al. cultural landscape model to specific NPS units during the late 1980s include Cumberland Island National Seashore, Georgia; Buffalo National River, Arkansas, and Ebey's Landing National Historical Reserve, Washington. See Katherine Ahern, Cultural Landscape Bibliography: An Annotated Bibliography on Resources in the National Park System, Leslie H. Blythe and Robert R. Page, eds. (Washington, D.C.: U.S. Department of the Interior, National Park Service, 1992).

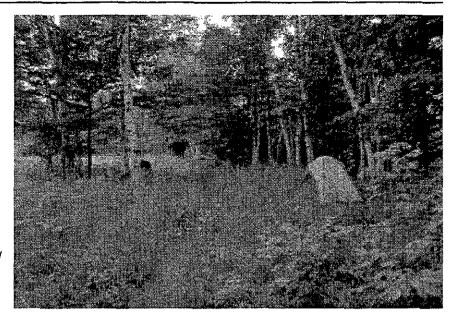


Figure 6.1. The relict cultural landscapes of North Manitou Island provide contemporary visitors with diverse aesthetic experiences, and represent intriguing destinations for exploration and temporary inhabitation.

several hiking excursions to distant points on the island." ⁶⁹ He hiked northward along the shoreline to the former site of the Maleski family fishing camp, then traveled on one of the trails to the Adam and Mary Maleski farmstead, and then returned to his camp site in "an old apple orchard." Before departing for the mainland, Stone "wandered around the buildings maintained by the Park Service for rangers." ⁷⁰ Freelance writer Colleen Kalchik recorded a similar experience. After arriving at North Manitou Village, she and her companion enjoyed a walk through the fields behind the village. Kalchik's party then hiked through the woods until they entered a clearing where they lingered, eating wild strawberries. They camped "on a ridge at the edge of a vast meadow that was once the site of Crescent City." The next day they hiked to Tamarack Lake, and then continued to the beach. ⁷¹

As these accounts illustrate, island visitors structure their experiences in relation to the existing cultural landscape, which includes both cultural and natural features. Places such as the former Crescent townsite, and the Frederickson, Johnson, and John Maleski places, represent important landmarks that function as both waymarkers and destinations. The edges of these clearings are among the island's most popular camping sites. Ironically, the current DCP/IP calls for the eventual elimination of many features—cultural landmarks and destinations—that island visitors find most interesting. If fully implemented, the NPS vision would transform most of the island into a vast expanse of deciduous hardwood forest.

When the NPS developed the North Manitou Island DCP/IP, relatively few people expressed either support or opposition to the agency's proposals. Perhaps this was because the island's natural beauty, its human history, and its enigmatic cultural landscapes were all but unknown to the general public. The island had been closed from the public for more than half a century, accessible only to a

⁶⁹ Mark Stone, "Sweet Isolation: The Pristine Quietude of North Manitou," The Gazette (Elk Rapids, Mich.), 24 June 1994, 1.

⁷⁰ Ibid., 21, 22.

⁷¹ Colleen Kalchik, "Manitou: You Can Feel the Energy on Lake Michigan's Spirit Islands," Northern Express (Traverse City, Mich.), 12 July 1995, 4-5.

select group of individuals (figure 6.2). Most of these people, almost all of them socially privileged white males, knew the island only as a playground. Some of these men had marginal connections with the island to begin with, and by the mid-1980s many were deceased, or had little interest in future plans for the island. North Manitou was a place without a past. It was also a place without a vocal constituency. Rita Hadra Rusco, one of only a few people who had a long-standing relationship with the island landscape, was a lonely voice calling attention to the North Manitou's rich and varied human history and its notable cultural features. She provided the agency with extensive comments, but her pleas for preservation and interpretation of the island's cultural landscapes went unheeded.

More than a decade after the North Manitou Island DCP/IP was approved, the island now has many advocates who share Rusco's deep-seated understanding and affection for North Manitou's human history and cultural landscapes. The island has slowly gained a larger constituency, both within the NPS and among countless park visitors—people who are familiar with the island's distinctive sense of place and who care deeply about its future. Although North Manitou Island certainly has evolved during the years since the DCP/IP was approved, the landscape may have changed significantly less than our ability to see and interpret it. The following general recommendations apply to the island as a whole:

\$Update and Revise the North Manitou Island DCP/IP

The NPS should reconsider the appropriateness of the 1987 North Manitou DCP/IP in light of the shift that has occurred in our understanding of the island's history and its resources, as well as the greater public awareness and appreciation of these resources that have accrued since the plan was developed. Recent NPS activities



Figure 6.2. For several decades, North Manitou Island was accessible primarily to an elite class of men, most of whom used the island for recreation during brief periods of time. Until the NPS opened the island to the public in the mid-1980s, North Manitou remained a landscape of "mystery and tremendous silences."

and projects (e.g., the North Manitou Island photovoltaic array system) have departed from specific elements of the plan. Furthermore, comments contributed by park visitors since the late 1980s consistently have questioned the NPS treatment of cultural resources and the minimal interpretation of human history on the island.⁷² The Michigan State Historic Preservation Office has called for a thorough revision of the North Manitou Island DCP/IP.⁷³

*Develop an Interpretive Program for North Manitou Island that Fully Integrates Human History

In reevaluating the North Manitou DCP/IP, the NPS should strive to understand the island as a cultural landscape that has both historical and contemporary cultural dimensions. Specifically, the NPS should undertake assessments of the island's place in American Indian and Euro-American folklore and literature, its history as a recreational landscape (e.g., the historical development of private summer cottages, the Manitou Island Association's sport hunting business), its history as a site for ecological experimentation and research (e.g., vegetation research carried out by H. N. Whitford, Henry C. Cowles and the NPS, and wildlife studies undertaken by Robert T. Hatt, I. H. Bartlett, and the NPS), and the island's role as part of a larger historic maritime landscape. Interpretation focus on the cultural landscapes, rather than an idealized wilderness landscape. The approach should offer visitors an accurate portrayal of the North Manitou Island's human history, and it should embrace the evocative power of the island's ruins (figures 6.3 and 6.4).

Effective interpretation of the island's human history need not compromise the qualities of primitiveness and solitude that formed the basis of the original NPS development concept for North Manitou Island. Extensive signage, trail markers, and other physical or visually intrusive interpretive aids are not necessary. Rather, the NPS should ensure that the island's human history and its cultural landscape are interpreted to the public through publications, maps, and occasional presentations and demonstrations. The NPS should establish a small interpretive center at North Manitou Village, perhaps in one of the Cottage Row structures. The center should include exhibits of historic island artifacts and photographs, and might be staffed by volunteers on an as-available basis. A small interpretive facility could be accommodated in one of the existing historic structures of the village, and should not be considered to exceed the "minimum tool" required for proper interpretation of North Manitou Island's natural and cultural resources. The NPS or park volunteers periodically might offer slide presentations dealing with an overview, or specific aspects, of the island's natural and human history. In addition, two village structures—the 1854 Volunteer Rescue Station and the MIA sawmill-should be restored and regularly opened to the public. As part of the National Maritime

⁷² See the following chapter for an assessment of recent public opinion regarding cultural resources management and interpretation on North Manitou Island.

⁷³ Michigan State Historic Preservation Officer to Superintendent, Sleeping Bear Dunes National Lakeshore, 1 December 1994.

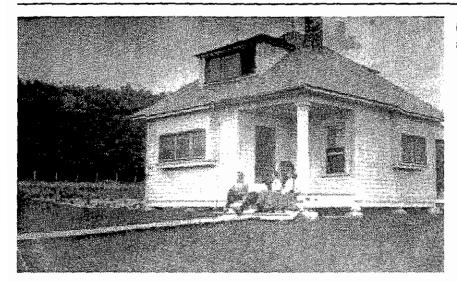


Figure 6.3. John Newhall cottage shortly after its construction in the early 1900s.



Figure 6.4. John Newhall cottage interior, 1997. "Discovery sites" such as this encourage visitors to pose questions about the human history associated with the landscape around them. Instead of ignoring these silent, enigmatic vestiges of the past, the NPS should provide interpetive aids that help visitors understand the island's human history, and prompt additional questions about the present relationship of history to nature.

Initiative Landscape District study, the NPS also should consider the potential restoration and interpretation of one of the Cottage Row summer houses.

*Review Wilderness Management Techniques in Relation to Visitors' Experiences and Expectations

Lastly, the NPS should examine the cultural basis of the wilderness concept, and determine how well suited certain wilderness management techniques are to the North Manitou landscape and the expectations and desires of island visitors. In attempting to delineate common ground between the cultural landscape and wilderness ideals, the NPS should identify the attributes and qualities of the North Manitou landscape that are most highly cherished by island visitors. This evaluation could include responses from visitors obtained through a systematic survey. ⁷⁴ It seems likely that desired landscape experiences, such as a "sense of mystery," a "feeling of discovery," or a picturesque view, are connected to both natural (i.e., wilderness) and cultural resources on the island. The planning effort should focus foremost on these intangible qualities and, by extension, deal with specific landscape elements. Such an approach may serve to highlight which wilderness values are particularly appropriate for management on North Manitou Island, and may suggest points of convergence between natural and cultural resources management objectives. For example, preservation of a sense of "isolation" is highly compatible with the cultural resource recommendations presented in this report.75

Focused scrutiny of the intangible qualities of North Manitou's landscape also may inspire new directions for interpretation-approaches that more fully express the island's genius loci and come closer to the national lakeshore's stated objective of presenting natural history and human history as "inseparable parts of the interpretive story."76 Again, it seems likely that this approach would highlight the extent to which nature and culture are intertwined in landscapes like North Manitou. NPS interpretation might build upon points of convergence, and emphasize historical continuities. For example, the environmental attributes of "primitive character," "relatively large size" the cultural value of "solitude"—which were recognized by the Sleeping Bear Dunes National Lakeshore GMP and the North Manitou Island DCP/IP—are not recent discoveries. These qualities have been appreciated by the region's native inhabitants, by nineteenth-century travelers, poets, and recreationists, and by early-twentieth-century industrialists, ecologists, and sportsmen.

The "wilderness" landscapes of North Manitou Island indeed may inspire an appreciation of the island's natural beauty and isolation, but the historical depth and cultural roots of such perceptions are revealed in landscapes like Cottage Row and the Bournique summer residence—cultural landscapes that were, in part, inspired by aesthetic ideals that remain potent today. Likewise,

74 Stakeholder groups also should be

and suggesting this example.

identified and incorporated into the planning process. Some of these groups may enter into formal, partner relationships with the NPS to assist in achieving plan objectives. Giving such groups an active role in the planning process increases the likelihood of successful partnerships in the future. Several organizations, including Preserve Historic Sleeping Bear, the Timber Framers Guild, Michigan Barn Preservation Network, and Sierra Club chapters, already have expressed interest in assisting the NPS with cultural resource preservation projects on the island. 75 The authors gratefully acknowledge NPS reviewers Kim Mann, Marla McEnaney, Theora McVay, and Sherda Williams for encouraging this approach,

visitors may encounter "a feeling of self-reliance" not only in landscapes where "the imprint of man's [sic] work is substantially unnoticeable," but also at the abandoned subsistence farmsteads of the Nerland-Anderson or Maleski families. If visitors come to such sites with an awareness of the difficulties encountered by the island's immigrant farmers during the nineteenth century, they may leave with a new and deeper appreciation of what "self-reliance" means in an "inaccessible" landscape like North Manitou Island.

Experiences of the kind described above can be encouraged only if resource managers recognize the expressive power of the North Manitou landscape as it currently exists, not as it might exist if it more closely approximated a wilderness or cultural landscape ideal. The DCP/IP revision process should strive to respectfully integrate current understanding of the island's human and non-human history into a unified landscape management and interpretation strategy. Because they are interrelated, resource management and interpretation must be considered in tandem.⁷⁷

∰∰����

Specific Treatment Recommendations for Cultural Resources

The remainder of this chapter outlines some specific treatment and management recommendations for historically significant resources on North Manitou Island, with special attention given to those elements associated with the island's agricultural history. In each case, the recommended approach takes into account the historical significance and the interpretive potential of the resource, as well as the preservation of wilderness values. Several of the recommended treatments represent a departure from current management practices on North Manitou Island. Although some of the proposed measures are not typical practices in wilderness areas, neither are they incompatible with wilderness values or wholly inconsistent with NPS wilderness management polices. Likewise, a few of the recommended treatments represent unconventional CRM practices.

⁷⁷ One possible interpretive strategy, including implications for resource management, is sketched in Chapter Seven.

However, such proposed changes are consistent with the direction that management philosophy has taken in recent years. They represent neither a radical departure from, nor maintenance of, the status quo. Rather, they simply express changes in perspective brought about by the discovery of new information, and changes in the ways in which we interpret and value the island's resources, both natural and cultural.

As discussed in the previous chapter, six resources currently are included, or appear to meet the criteria for inclusion, in the National Register of Historic Places. These include four districts, one structure, and one site. In addition, one district—the "Manitou Island Dunes Historic District"—was identified for additional research and NRHP evaluation. Treatment and management recommendations for each of these resources are outlined below. In each case, the suggested treatments take into account the historical integrity of the resource, its level of significance, interpretive potential, and, where applicable, compatibility with current wilderness management objectives.

Although specific management strategies are suggested for each of the three proposed historic districts of North Manitou Village, treatments should be applied in a manner that is mutually consistent among the three, as these districts together comprise a larger whole, and provide visitors with their first impressions of the island. The current management scheme, which arbitrarily places Cottage Row and portions of the MIA farm complex outside of a "wilderness exclusion" area, and which subjects certain structures to museum-quality restoration while others collapse due to neglect, reflects neither the visual and spatial unity of the area, nor its historical role an important locus of human activities ranging from prehistoric-era hunting and fishing, to Euro-American agriculture, maritime commerce, logging, and recreation.

Manitou Island Syndicate / Manitou Island Association North Manitou Village Farm Complex

The MIS/MIA North Manitou Village Farm Complex should be nominated for inclusion in the National Register of Historic Places together with the MIA West Side Barn as part of a thematic, Manitou Island Association multiple-resource designation. The resources of the Manitou Island Syndicate/Manitou Island Association Farm Complex district possess varying levels of integrity. The proposed treatments generally correlate with the level of integrity, and range from *stabilization* to *restoration*. The necessary investments related to treatments thus reflect the complexity of the individual resources and the role they play in the overall district.

Structures

MIA Farm Structures

The extant structures of the district should be rehabilitated and reused to accommodate NPS maintenance and storage needs. The village barn, equipment shed, and gasoline shed are currently in use. Other structures should be stabilized until an appropriate use is identified. Ruinous structures should be left in place, and the immediate vicinity cleared of woody vegetation. If additional equipment storage or maintenance space is required in the vicinity of the MIA farm complex, the NPS should reconstruct either the carpenter or machine shop, or both. The reconstructed sheds should, as closely as possible, recreate the external appearance of the original structures. In the meantime, the ruins of these structures should be left in place.

MIA Sawmill

Because of its exceptional integrity, and its statewide level of historical significance, the MIA sawmill should receive a higher level of treatment than other structures in the district. The sawmill should be restored and interpreted to the public. The structure occasionally should be opened to the public for historical demonstrations. A museum-quality restoration would be appropriate.

NPS Photovoltaic Array

The photovoltaic array constructed by the National Park Service in 1996 is a modern, visually intrusive structure. The array should be screened by plantings of low, native shrubs. In addition, an interpretive panel should be added to the site. The panel should explain the function of the array, and provide some historical interpretation of the MIA and the surrounding village farm complex.

Landscape Features

Fields and Orchards

The treatment of the former fields and orchards should be preservation, with the goal of maintaining the current level of spatial definition in the large clearing surrounding the village. If the historic district is to remain within the wilderness designation, mechanical mowing is precluded as a viable maintenance technique. Management by fire also is probably not feasible. Cutting invasive woody vegetation by hand is the method most consistent with the "minimum tool" requirement of NPS wilderness guidelines. Hand cutting is labor intensive. Fortunately, invasion of the clearing by woody species has not been rampant. Nonetheless, this management intervention would represent a cyclical labor commitment that would have to be repeated every three to five years. The clearing could be divided into treatment zones, so that only a portion of the entire area would demand attention during any one year. Because

hand-cutting does not require special skill, the NPS should attempt to recruit volunteer labor for this task.

Trees

Historic photographs suggest that vegetation in the vicinity of the MIA farm complex was never highly manipulated for the sake of appearance. In the fields and orchards, patterns of vegetation primarily reflected functional and utilitarian considerations. In the margins, and around buildings and structures, native disturbanceadapted vegetation predominated. The most significant historic vegetation features remaining in the MIA farm vicinity are a row of large sugar maple trees (Acer saccharum) that lines the old dock road near the stone MIA office building, a double row, or allée, of butternut trees (Juglans cinerea) flanking the road near the generator building, and several large clumps of Lombardy poplar (Populus nigra) trees, which may have been planted among the buildings for ornamental purposes. These rows of maple and butternut trees are visually prominent features, and represent an attempt to use vegetation for aesthetic effect. Both of these features should be maintained and preserved. The full allée of butternuts should be re-established at the same location after more than half of the original plantings have died. Likewise, the row of sugar maples should be replanted after it has lost more than half of its constituent members.

The Lombardy poplar trees have a distinctive columnar form and silvery green foliage that shimmers in the breeze on sunny summer days. Most of the Lombardy poplars are located south of the farm building cluster, and in the vicinity of the MIA sawmill (figure 6.5). Historic photographs suggest that the vegetative cover of Lombardy poplars in the vicinity of the farm complex may be significantly more dense now than at any previous time. It may be desirable to thin the existing stands to make them more closely

Figure 6.5. Lombardy poplar grove near the Manitou Island Association sawmill. Due to their peculiar upright growth habit, silvery green foliage, and tendency to propagate vegetatively, Lombardy poplar trees are the most distinctive features of the North Manitou Village area. In some areas, the poplar groves probably are larger and more dense than they were during the early twentieth century.



approximate the landscape of the late 1920s. Reducing the densities of the Lombardy poplar groves would retain them as character-defining landscape elements, while also opening up views toward the lake, and allowing glimpses of the historic structures by visitors who arrive by ferry.

Historic photographs should serve as a guide for any plan to thin the Lombardy poplar stands. In addition, care should be taken to leave trees in place where they serve to screen the view of the modern PV array. Lombardy poplar spreads vegetatively by root sprouts, often forming dense clonal stands. Because the species propagates readily from root sprouts, simply cutting individual stems will not, in the long run, substantially reduce the density of the stands. In fact, cutting alone may stimulate increased sprout production. To prevent this, the cut surface of the stump should be treated with a topical, bio-degradable herbicide, such as glyphosate. This treatment should be implemented on a limited, experimental basis at first. Only a very few individuals of a particular stand should be treated initially, and the effect monitored over a two-year period.

North Manitou Island Life-saving Station

The treatment and management needs of the North Manitou Island Life-saving Station historic district lie outside the scope of this report. The historical significance of these resources is derived primarily from their association with maritime navigation on the Great Lakes. Interpretation of the island's maritime history should be centered on the life-saving service district. The district's later association with the Manitou Island Association and the Angell Foundation also should be considered, however. The district's current period of significance, 1854-1932, reflects its national-level of importance in U.S. maritime history. On the other hand, the district's overall significance may extend beyond 1932 when the Manitou Island Association's activities were based there. Before considering interpretation and treatment alternatives for the district's resources, the NPS should document and evaluate the significance of the station's evolution during the MIA and Angell Foundation era. Critical cultural resource management issues include the potential exterior restoration of the U.S. Lifeboat Station and the Crew Ready Room, and treatment of post-Coast-Guard-era vegetation, such as the ornamental trees and shrubs planted by the MIA and the Angell Foundation.

Cottage Row Historic District

Detailed management recommendations for the individual resources of Cottage Row are beyond the scope of this report. However, Cottage Row is certainly a resource that warrants immediate attention. Additional historical research, focusing on the resources of the district and on the recreation context for the Sleeping Bear Dunes National Lakeshore in general, is warranted. Specifically, additional

research should strive to determine the significance of the structures as examples of late-nineteenth-century resort architecture, the historical prevalence of communal cottage developments in the upper Great Lakes region, and the extent to which well-preserved examples of such developments survive in the region today. Cottage Row should be incorporated into the National Maritime Initiative Landscape District, which currently is proposed by the NPS.

Several Cottage Row structures require immediate stabilization before they suffer the same fate as the Blossom Cottage. Appropriate interventions may involve clearing invasive, non-cultural vegetation from around the foundations of buildings, and making temporary repairs to the roofs of structures. Serious consideration should be given to the rebabilitation and adaptive reuse of the district's habitable structures. Potential uses might include a visitor contact station and/or interpretive center, youth or elder hostels, and seasonal artist residences. In addition, a Cultural Landscape Report should be prepared for the district.

Manitou Island Association West Side Barn

The MIA West Side Barn is the only significant structure remaining on the western side of North Manitou Island. Because of its large size, its picturesque situation near the edge of a large clearing that provides spectacular views of Lake Michigan, and its pleasing architectural design, the barn is an extremely valuable "discovery site." The significant aesthetic qualities and historical associations of the site should be recognized and preserved.

The MIA West Side Barn should be nominated for inclusion in the National Register of Historic Places together with the North Manitou Village Farm as part of a thematic, Manitou Island Association multiple-resource designation. Because this structure remains in excellent structural condition, rehabilitation and adaptive use is the most appropriate treatment. Until a suitable use (e.g., a back-country ranger station) is identified, the barn should be stabilized and preserved.

Frederic M. Beuham Orchard

The Frederic M. Beuham Orchard's local level of significance, moderate level of historical integrity, immense size, and its position within a proposed wilderness area, suggest that intensive treatment of this landscape is impractical. Restoration and rehabilitation of the landscape would entail replanting hundreds of fruit trees, as well as intensive maintenance practices, such as fertilizing, pruning, and pest management. Given the landscape's current context, either preservation or stabilization represent more appropriate treatment schemes.

As a treatment strategy, preservation would aim to maintain the landscape's current level of integrity, while not attempting to replicate its historic composition or appearance. Preservation would entail halting the further decline of the orchard, while also propagating historic plant materials for replanting after the original trees die. The goal of stabilization, a less intensive treatment approach, would be to extend the life of the orchard for as long as possible. Ultimately, however, the landscape could not be stabilized permanently. The remnant trees eventually would die and, if not replaced, the historical integrity of the entire landscape would be lost.

Visually and aesthetically, the Beuham Orchard is one of North Manitou Island's most significant cultural landscapes. Upon first sight, the vast size of the clearing, especially when contrasted with the dense forest surrounding it, is awe-inspiring. The orchard is an unexpected and refreshing contrast to the expanse of maple-beech forest surrounding it, and adds to the complexity, diversity, and richness of the larger North Manitou landscape. The regular, monotypic plantings of nearly uniform-size trees immediately identify the site as a cultural landscape. Furthermore, the Beuham orchard is the most intact landscape on the North Manitou Island that represents the historical significance of commercial fruit cultivation on the island and within the Sleeping Bear Dunes National Lakeshore region. The landscape possesses important historical associations and, in terms of visitor experience, functions as a unique "discovery site."

The aesthetic qualities of the landscape should be retained. Therefore, a preservation approach is recommended. Treatment interventions should include a minimal maintenance program of fertilizing and liming (if determined necessary by a soil analysis), and the removal of dead wood from living trees. The various cultivars represented in the orchard should be identified. As existing trees die, new plants, propagated from living specimens on the site, should be planted. New trees should occupy the positions of those trees that are most completely decayed, leaving recently-deceased individuals in place, thereby maintaining the characteristic order and structure of the planting pattern. The planting pattern and spatial integrity of the landscape also should be maintained by periodic removal of invasive woody vegetation. This should be done by hand cutting woody invasives and then, if necessary, treating the cut surfaces of stems with a non-persistent herbicide, such as glyphosate.

Alvar and Mary Bournique Residence

The North Manitou Island DCP/IP specified no use for the Bournique property; the structures were slated to become "moldering ruins." The PMOA developed in consultation with the Michigan State Historic Preservation Office specified that the property would be recorded by HABS Level III documentation in order to mitigate the adverse effect of the DCP/IP on this historic property. As stipulated in the DCP/IP, treatment of the Bournique property by the NPS has been "general neglect." The property is remote from

the village, and currently there appears to be no practical use for the structures. Rehabilitation is an appropriate treatment for the Bournique property, provided a compatible use can be identified. Until then, the management goal for the Bournique property should be to preserve the landscape in its current state, and thereby sustain its historical associations and extend its evocative power as a ruin into the future.

Continuing to allow the structures to deteriorate would lead to the loss of historical integrity and, eventually, the loss of the property's evocative power as a discovery site. Because of the Bournique property's evocative power as a ruin, and due to its importance in illustrating broad patterns in the history of North Manitou Island, the Bournique property should be *stabilized* and retained as a ruin. The structures should be minimally repaired in order to preserve and maintain their current level of physical integrity. Historic building debris should remain at the site. Only potentially hazardous elements such as glass or sharp metal objects should be removed. The landscape and its history should be interpreted to visitors through literature, or exhibits at North Manitou Village.

North Manitou Island Dunes Historic District

If determined eligible, the North Manitou Island Dunes Historic District should be nominated to the National Register of Historic Places as a part of a thematic, multiple resource designation that includes the other, historically intact, research sites that were central to the development of plant ecologist Henry C. Cowles' theory of succession. Within Sleeping Bear Dunes National Lakeshore, the potential districts include portions of North Manitou Island and the shoreline in the Glen Haven vicinity, where Cowles carried out ecological investigations. The dunes at Dune Park, Indiana, served as one of Cowles' primary research sites, and are thus key to the overall integrity of the collection of landscapes representing Cowles' research. 78 Since some of the northern Indiana sites now are protected by Indiana Dunes National Lakeshore, it would be appropriate for the NPS to initiate NRHP-designation of the remaining, intact research sites of Henry C. Cowles. This could be a cooperative project of Sleeping Bear Dunes and Indiana Dunes national lakeshores.

The most appropriate management of the potential North Manitou Island Dunes Historic District landscape is preservation of the characteristics associated with Cowles' ground-breaking ecological research—specifically, the on-going natural processes of dune formation and dunal vegetation succession. In other words, the goal of cultural landscape management should be to foster continuance of "natural" shifting landforms, and patterns of vegetational composition and distribution. The dunes landscape should remain a "restless maze" much as it was when Henry C. Cowles studied the area, and much as it currently exists today. If considered appropriate

⁷⁸ The Dune Park, Indiana, location later became Indiana Dunes State Park. Intensive sand mining and industrial development during the twentieth century radically changed the physical geography of much of the Indiana dunes area. The multiple resource nomination should address the extent to which mining activities have impacted the historical integrity of the dunes and interdunal wetlands that Cowles studied.

and consistent with wilderness management techniques, the NPS should consider methods for restoring species that have been extirpated from the North Manitou dunes since the arrival of white-tailed deer (e.g., Juniperus communis, J. horizontalis, Arctostaphylos and Prunus pumila).

The proposed preservation treatment approach is entirely consistent with NPS management policies for natural zones, which state that "natural shoreline processes (erosion, deposition, dune formation, inlet formation, and shoreline migration) that are not influenced by human actions will be allowed to continue without abatement except where control measures are required by law." Regarding the dunes, natural resources and cultural resources management converge, united by a common purpose and shared goals.

- 🕸 🕸 🕸

Treatment of Otber Structural and Landscape Ruins on North Manitou Island

Several resources on North Manitou Island function as significant reminders of past human habitation and important cultural land-scape elements, even though they do not meet the criteria for inclusion in the National Register of Historic Places. These elements contribute to the aesthetic complexity and richness of the North Manitou landscape (figure 6.6). They test our ability to surmise the past structure of a landscape or a building, and challenge us mentally to "reconstruct" the building or the scene. They force us to contemplate the passage of time. When these cultural features disappear, their power as carriers of meaning and their capacity to provoke the imagination of visitors will fade as well. The expressive value of these sites should not be casually discounted. Rather, the management of these landscapes should recognize the evocative power and interpretive potential of such "non-historic" cultural features.

⁷⁹ National Park Service, Management Policies, 4:20.

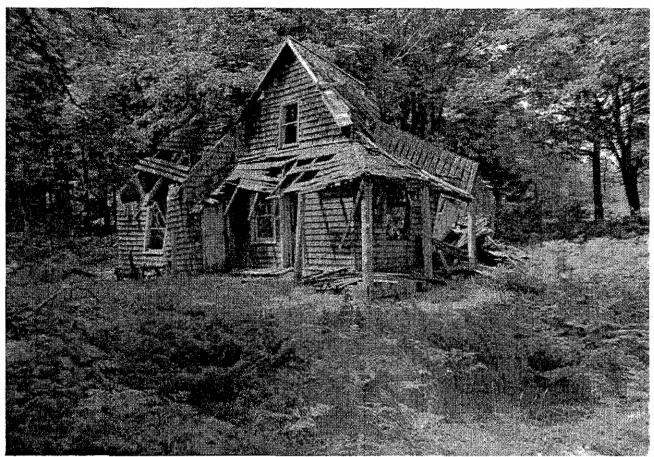


Figure 6.6. The unique and profound associative values of ruins, or "discovery sites," like the nerland / Anderson house largely have gone unacknowledged and under-appreciated by resource managers. Ruins are cultural resources that allow visitors to explore facets of both non-human nature and human history.

Certain non-NRHP-eligible cultural resources on North Manitou Island should be managed as didactic landscapes. These landscapes neither would be targeted for preservation treatment, nor would they be subjects of intensive historical interpretation. Instead, the salient character-defining features would be allowed to remain in place, and the on-going processes of natural decay would be acknowledged and documented. This is essentially a "moldering ruin" policy. However, the proposed approach differs from previous NPS policy in that it is not primarily an attempt to erase evidence of past human habitation from the landscape. Rather, it reflects a purposeful effort to use such landscapes as mediums for learning about the past, about the passage of time, and about the processes of nature. The didactic power of such environments might be best exploited through documentation of changes in the landscape, and through an interpretive strategy that encourages visitors to explore and contemplate these sites in innovative ways.

Interpretation of these landscapes, for example, might focus on patterns of vegetational succession, or the opportunity to observe historic construction techniques that a naturally "deconstructed" house so well affords. The processes of architectural deconstruction could be documented by establishing a series of datum points for annual rephotography of the various sites and structures. In this way, the ability of these landscapes to express the passage of time may be captured in a collection of photographs that

could be used in interpretive programs. Perhaps the best candidates for such interpretation are the landscapes that include the ruins of the houses built by Paul Maleski, Lars Alstrom, and Mads Nerland, the spectacular series of connected clearings associated with the Nelson and Sophia Carlson farm, and the vast clearing that encompasses the former lumber town of Crescent and the MIA west side farm. Much of the value of a National Park landscape like North Manitou Island is its ability to be seen and understood as a record of human and natural history. The remainder of this report is an attempt to uncover the nuances and power of the landscape's interpretive potential.

Some of our history can be found in books and old photos, a legacy that is more or less enduring. . . . There is another history though. It is a history that one cannot glean from extensive reading. This history requires more effort. It is the silent legacy of an abandoned but still producing apple orchard, the testimony of a weathered but still standing home, the puzzle of an unidentifiable plant or piece of metal or bone, the wavy gaze of an unbroken window made before the time when windows were perfect and alike. Most of all, it is that most ephemeral of histories: the history that resides within the people who have lived it. — Andrew McFarlane[†]

[†] Andrew McFarlane, "Great Spirits: The Living History of Manitou," *The Gazette* (Elk Rapids, Mich.) 5(2): 21 (24 June 1994).

Chapter Seven

A Paradoxical Wilderness



It is impossible to represent the landscape of North Manitou Island, or any landscape, with detached objectivity. Our sense of the world around us is constrained by the proficiencies and limitations of our human sensory apparatus, filtered by broader cultural traditions, and contextualized individual, personal experiences. Without even realizing it, we select pieces of information from the surrounding scene, and ignore other facets. From the selected componentry, we construct "reasonable explanations" of how an environment works, usually based on a set of familiar narratives—well-known "stock plots" derived from paradigms of causal relationships and seemingly universal axioms. Such narratives provide us not only with a means to comprehend the world around us; they also are instructive, suggesting appropriate or advantageous ways to interact with the environments we encounter. They help us make the wilderness around us comprehensible, livable, comfortable.

We cannot separate landscapes of reality from the mythic landscapes that exist in our minds. This does not mean that we cannot uncover truths about the landscapes that we exploit, inhabit, or cherish. Rather, it means that our knowledge of landscapes arises from a uniquely human perspective. Our landscape experiences, and understanding, have biological, cultural, and personal bases. Through personal experiences, our knowledge of landscapes (the world around us) is always evolving, but it is doing so in accord with our physiology, and within cultural traditions.

One of the things we know is that the landscapes around us are constantly changing in ways that are both predictable and

unexpected. North Manitou Island is shaped incessantly by processes of non-human nature—by drifting sand and eroding waves, by growing trees, by rain falling from torrential cloudbursts. Yet the island landscape also is constructed through species protection legislation, recreational use policies, poetry and postcards, stories, memories, and myth. This landscape is inescapably a product of both nature and culture, and it changes continually in response to both. Acknowledging the role of human ideas in creating places such as North Manitou Island is a first step toward more fully understanding the complexities of these landscapes. Furthermore, it is an important step toward situating humans and human actions within nature.

Few places speak so powerfully about the ability of human values to shape landscapes (both material and cognitive) as island environments such as North Manitou Island. The island clearly played an important role in the mythology of the native Americans who inhabited the region before the arrival of European settlers. Never used intensively as a hunting and fishing ground, the island was much more significant to the native population as a place of symbolic power. It occupied a significant node in the landscape cosmology of the region's indigenous people. The island expressed the people's relationship to spirit beings—the Manitouk—and to the rest of the non-human world. Euro-Americans also viewed the island landscape as a place of symbolic meaning, but through a different cultural lens.

In both Eastern and Western traditions, islands have been associated with images of Eden. The idea of a geographically isolated, island paradise is recurrent in Western mythology and literature. The "Isles of the Blessed," ancient islands with perfectly supportive natural environments, were part of Greek mythology since at least the eighth century BC. The island paradise is often represented as a lost world. The lost utopian civilization of the fabled island Atlantis, the history of which Plato recorded in his dialogue Critias, is perhaps best known. But tales of other lost islands long have captured our imagination. For example, the myth of the Fortunate Islands, contained in the romantic medieval epic, The Voyage of Saint Brendan, remained popular through the Middle Ages. Accounts of the Fortunate Islands became so important in Western tradition that they influenced early European explorers. When Christopher Columbus recorded his initial impressions of the islands of the Bahamas, Cuba, and Hispaniola (Haiti), his description bore a striking resemblance to the centuries-old account of the Fortunate Islands.1 Needing a way to comprehend of the unfamiliar landscapes that he encountered, the Italian explorer instinctively resorted to the familiar narrative of St. Brendan and the western European tradition of paradise.

Nineteenth-century Euro-American settlers did not mistake North Manitou for an island paradise in the sense of the Isles of the

¹ Yi-Fu Tuan, *The Good Life* (Madison, Wisc.: University of Wisconsin Press, 1986), 27.

Blessed or the Fortunate Islands. They did, however, vest it with a special meaning that was rooted in a uniquely American conception of paradise called wilderness. Historian Roderick Nash has concluded that wilderness has always been a "basic ingredient of American civilization." During late nineteenth and much of the twentieth centuries, much of American history has been portrayed as the transformation of the wilderness into settled communities. In 1893, this narrative of progress was sketched definitively in historian Frederick Jackson Turner's frontier thesis. Wilderness eventually came to represent a lost world—the source of American institutions, culture, and values. During the late nineteenth century such cultural associations were combined with Romantic aesthetic traditions, which associated wild landscapes with ideals of "picturesque" beauty and the "sublime"—embodying the sacred. Together, these notions inspired efforts to reclaim and preserve wild or "native" landscapes. Wilderness became an important symbol of American nationalism during the nineteenth century, and wilderness landscapes continue to be sources of national pride and identity.3

As Nash has noted, an appreciation of wilderness was latent in American culture from very early on. Indeed, the wilderness narrative appears to undergird Euro-American perceptions of, and interactions with, North Manitou Island even during the early decades of white settlement in the region. From the early 1800s onward, the North Manitou landscape has been shaped by two countervailing attitudes toward nature—one which views the island as a kind of wilderness Eden, and another which conceptualizes it as a treasure trove of natural resources to be exploited. These two themes run concurrently through the history of the island, and represent two conflicting traditions. The landscape has been modified in response to both.

This conflicted attitude is expressed in one of the earliest written accounts of the Manitou islands. In lyrical prose, Margaret Fuller praised the natural beauty of the Manitou islands. Writing in 1843, Fuller remarked:

No one lives here except woodcutters for the steamboats. I had thought of such a position, from its mixture of profound solitude with service to the great world, as possessing an ideal beauty. I think so still, even after seeing the wood-cutters and their slovenly huts.⁴

For Fuller, the natural splendor of the island's beaches and forests transcended the marring effects of human habitation. Fuller viewed the taming of an island wilderness by human civilization as inevitable, yet she nonetheless lamented that "... centuries cannot again adorn the land with such [noble trees]." Three years later poet William Cullen Bryant also marveled at the natural beauty of the island when his steamer stopped there to take on wood. After reflecting on the "hillocks and hollows of sand" along the island's

² Roderick Nash, Wilderness and the American Mind, 3rd ed. (New Haven: Yale University Press, 1973), xi.

³ See Nash, Wilderness and the American Mind; William Cronon, "The Trouble with Wilderness," in William Cronon, ed., Uncommon Ground: Toward Reinventing Nature (New York: W. W. Norton, 1995), 69-90.

⁴ Margaret Fuller, Summer on the Lakes, in 1843 (Urbana and Chicago: University of Illinois Press [1844] 1991), 17-18.

⁵ Ibid., 18.

shore, and "an enormous growth of trees which must have stood for centuries," Bryant wrote:

We admired the astonishing transparency of the water on this shore, the clean sands, without any intermixture of mud, the pebbles of almost chalky whiteness, and the stones in the edge of the lake, to which adhered no slime, nor green moss, nor aquatic weed. In the light-green depths, far down, but distinctly seen, shoals of fish, some of them of large size, came quietly playing about the huge hull of our steamer.⁶

As the writings of Fuller and Bryant attest, early nineteenthcentury observers were not unmoved by the island's natural beauty. The Arcadian aesthetic sensibility of Fuller and Bryant, however, coexisted with an attitude that perceived the island as a store of natural commodities awaiting exploitation. Intensive timber harvesting left hundreds of acres of cleared land on North Manitou Island, and forever altered the composition and aesthetic character of the island's forests, as did both small-scale subsistence farms and large, corporate agricultural enterprises. No longer an island wilderness, North Manitou was a human-engineered landscape that, during the early twentieth century, supported a diverse community of up to 400 men, women, and children engaged in extracting sustenance and aesthetic pleasure from the island's soils, forests, waters, and golden sandy beaches. Yet even while trees fell and plows turned the island's sandy soils, North Manitou retained a sense of "profound solitude" and "ideal beauty" that attracted naturalists and recreationists from Chicago and other midwestern cities.

The island landscape, and public perception of it, changed with the displacement of the island community by the Manitou Island Association. During the 1920s the MIA intensified its farming and forestry activities, and at the same time began cultivating the island's image as a natural paradise. Under William Angell's direction, the Manitou Island Association bulldozed many of the abandoned farmsteads, thereby erasing vestiges of human history. Although he actively reshaped the North Manitou landscape, Angell apparently did not contemplate its restoration in ecological terms. Instead, he sought a more anthropocentric vision of wilderness. He set about to perfect nature, to correct some perceived deficiencies, by introducing non-native wildlife species, including pheasants, Guinea hens, chukar partridge, ruffed grouse, fox squirrels, raccoons, and white-tailed deer (figure 7.1). Later, the association stocked Lake Manitou with brown trout, rainbow trout, and small mouth bass. North Manitou's "wilderness mystique" crystallized during the 1950s, when the last vestiges of the traditional community disintegrated and the island came under control of the Angell Foundation.

As North Manitou Island evolved into a private enclave, its status as a wilderness paradise grew. The landscape became un-

⁶William Cullen Bryant, The Letters of William Cullen Bryant. Vol. 2. Edited by William Cullen Bryant II and Thomas G. Voss (New York: Fordham University Press, 1977), 444.

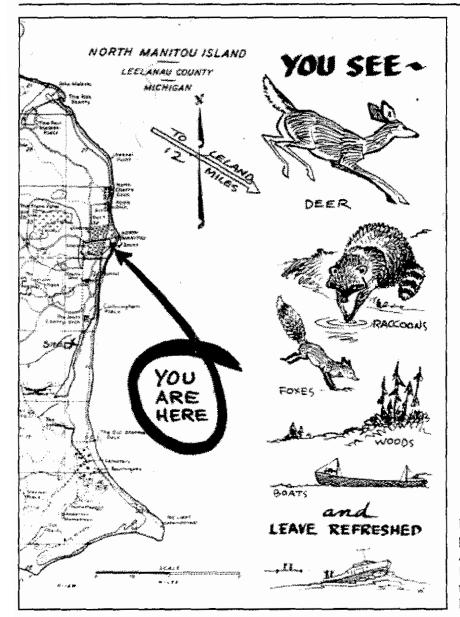


Figure 7.1. Manitou Island Association placemat, ca. 1950. The Manitou Island Association represented North Manitou Island as a sportsman's paradise—a place that teemed with wildlife, and a landscape little touched by humanity.

known to area residents, and its human history faded from collective memory. North Manitou became more isolated, not just geographically, but experientially and conceptually as well, becoming enigmatic and unknown. Local historian Julia Dickinson wrote in 1951:

North Manitou Island seems a place of mystery and tremendous silences to the infrequent visitor. The tallest hardwood trees in the county are found on North Manitou, and they seem as primeval today as they must have seemed to those people who were the island's first visitors.⁷

Reflecting popular perception of the island, Dickinson described an image of the island that perfectly reflected the Angell Foundation's marketing strategy during the 1950s through the 1970s.

Throughout this period the Association's promotional literature portrayed the island as a sportsman's Eden (figure 7.2). By the 1970s that theme was more overt—North Manitou Island had become

⁷ Julia Terry Dickinson, *The Story of Leelanau* (Omena, Mich.: Solle's Bookshop, 1951), 45.

You are welcome at
NORTH MANITOU
ISLAND



... a consionable wilderness, where hunting, fishing and nature are still as they used to be



Figure 7.2. The Manitou Island
Association's "comfortable wilderness" was a landscape engineered to be "wild" in a way that was conducive to human recreation and enjoyment. It was a conception that stemmed from a peculiar set of human values, and reflected a way of thinking as much as a landscape of reality.

a place where time stood still. One brochure proclaimed that a trip to the island is

a journey into the past, into Michigan as it was 100 years ago. Wild deer and turkeys are abundant.... Game fish still rise, as in the days of your great granddad.... N. Manitou Island has 15,000 acres of natural forest teeming with wildlife in the unspoiled beauty of early Michigan. The deer, the game, the forest, the cover, the shore—just like it used to be. No bars, no stores, no drive-ins, no highways. At North Manitou, you are back to the land and all its beauty.... [enjoy] one of the most comfortable, relaxing times of your life where you can experience the total escape.... Early Michigan was just like this.8

While not denying the island's human history, the MIA's literature implied that the contemporary landscape was superior to that of past eras because it was more wild, more rugged, and untamed. The power of the island's image as a timeless, natural paradise is reflected in an account by travel writer who, in the late 1970s, described the island as

the rarest of jewels—a true escape from the tensions of modern living. As soon as the plane ... puts down on the grass airstrip on the privately-owned island, you feel you have slipped back into the calm and grace of life in northern Michigan a half-century ago.⁹

History and memory had become almost completely displaced by myth.

The Angell Foundation cultivated North Manitou's image as a secluded wilderness retreat—an image that suppressed the island's human history, and foreshadowed subsequent National Park Service planning. In manipulating the island's ecosystem, William Angell and the Angell Foundation aimed to reshape the landscape according to an ideal, much as farmers and other island residents had attempted to do during the nineteenth century. However, instead of attempting to cultivate the island as a garden, Angell and his successors manipulated the landscape and its biotic communities to more closely approximate an ideal of wild nature—the "unspoiled beauty of early Michigan." They erased elements that did not "fit" the ideal, and added other components that appeared to be conspicuously "missing." They altered the landscape to make it more familiar, more aesthetically pleasing, more commodious—to make it a "comfortable" wilderness.

When the National Park Service (NPS) finally acquired North Manitou in the autumn of 1984, the island seemed like an obvious candidate for wilderness management. Relatively little effort was put forth toward understanding the island's cultural resources, perhaps because it was assumed to be unnecessary: North Manitou was thought to be a primitive landscape that reflected little

⁸ Brochure, "Welcome to North Manitou Island," ca. 1970s, MIA Collection, Sleeping Bear Dunes National Lakeshore, Empire, Mich.

⁹ Hamish Ogilvie, "Michigan's 'Secret' Island, North Manitou," *Michigan Living Motor News* 60(4): 24-25 (October 1977).

in the way of human history. North Manitou's buildings and structures were inventoried in 1979, providing a rudimentary level of documentation. After reviewing a report on the history of the island, one of the park's cultural resources interpretive staff was "impressed by how little actually took place on the island." In a 1986 memo he concluded that

except for periods of logging activity and the government lighthouse and life saving station, relatively little human activity took place.... The question of a museum on the island is moot. There is nothing to exhibit except photographs.¹⁰

Because North Manitou's human history was judged to be mundane and uneventful, historical interpretation was not an important part of the Development Concept Plan/Interpretive Prospectus (DCP/IP). In fact, the plan suggested that the island's human history should be intentionally downplayed in order to "preserve the primitive, wilderness character of North Manitou Island."11 Most of the buildings were scheduled to become moldering ruins, the island's cultural landscapes slated to return to their "natural" state. The island's human history could be ignored, and eventually forgotten. Since nature would reclaim North Manitou Island, visitors would find a primitive landscape experience "emphasizing solitude, a feeling of self-reliance, and a sense of exploration." 12 The NPS vision early resonated with Margaret Fuller's portrayal of the island landscape of a century and a half ago. Its emphasis on qualities like "solitude" and concepts like "self-reliance" echoed core cultural values that Americans have long associated with wilderness environments. It is thus possible to see wilderness management of North Manitou as a continuation of a longstanding interpretive tradition that has roots extending well back into the nineteenth century.

Today, visitors to North Manitou encounter an enigmatic landscape—a "place of mystery and tremendous silences" by design. No wayside exhibits are provided to guide visitors in their exploration of the island. A brochure developed by the NPS contains two brief paragraphs about the island's human history and a map noting historic place names and features. The brochure advises island visitors to "use your imagination to interpret their meaning."13 Visitors arriving at the village are greeted by several glistening, white U.S. Coast Guard buildings ringed by the abandoned and crumbling structures of Cottage Row and the former Manitou Island Association farm. Campers heading south along the island's eastern shoreline encounter the island cemetery and the ruinous structures of the Bournique family's former summer retreat. Those heading inland into the dense forest interior travel upon roads that pass through abandoned homesteads and farm fields, all kept immaculately clear of invasive woody vegetation by the island's deer herd-nature's custodians of cultural landscapes. East of Lake

¹⁰ Park Ranger Herd to Chief Naturalist, "Review of Structures and Clutter on North Manitou Island," 6 October 1986, Sleeping Bear Dunes National Lakeshore, Empire, Mich.

¹¹ Ibid.

¹² Department of the Interior, National Park Service, Development Concept Plan/Interpretive Prospectus, North Manitou Island, Sleeping Bear Dunes National Lakeshore, Michigan (Empire, Mich.: Sleeping Bear Dunes National Lakeshore, November 1987), 20. This document references the Sleeping Bear Dunes General Management Plan.

Department of the Interior, National Park Service, "North Manitou Island, Sleeping Bear Dunes National Lakeshore," brochure, (Washington, D. C.: Government Printing Office, 1987).

Manitou, visitors see the vast 160-acre apple orchard planted in 1894 by Frederic Beuham and the Stark Bros. Nursery and Orchard Co. In the northwestern portion of the island, the trail follows the grade of the former Crescent railroad. The trail continues eastward to the Maleski farmstead, the former home of the last independent farm family to leave the island. In sum, visitors encounter a patchwork landscape of dunes, thousands of acres of dense, maple-beech deciduous forest, and endangered wildlife habitat, as well as a diverse array of vernacular buildings and cultural landscapes that record past and present uses of, and attitudes toward, nature and the land.

Nevertheless, the wilderness image promoted by the Manitou Island Association and the National Park Service remains potent. A 1999 article published in a popular Michigan travel magazine conveys to readers the now-traditional characterization of the Manitou islands. Although both islands "are popular with hikers and campers," the author notes that South Manitou "is home to a restored 1871 lighthouse, shipwrecks and a virgin cedar forest." North Manitou, on the other hand, "features 15,000 acres of wilderness with great views of the dunes and Pyramid Point." In summary, South Manitou offers a cultural landscape rich in both human history and natural features, whereas the primary attraction on North Manitou is wild, scenic nature, pure and simple.

As more people have become familiar with the actual landscape of North Manitou, public interest in the island's history has grown. Visitors' curiosity about the island's cultural features and human history has been satisfied by Rita Hadra Rusco's book and map of the island's cultural geography. The popularity of Ms. Rusco's book and map demonstrates that there is a void, albeit intentional, in the NPS planned visitor experience. Park staff also have developed a deeper appreciation for the island's history. On their own accord, North Manitou rangers and Sleeping Bear staff began offering informal walking tours of the village area in 1993. Reports of these activities prompted the assistant superintendent to issue a memorandum reminding employees about the limits placed on interpretation by official park planning documents. The assistant superintendent stated

... we ask that you plan your 'tour' to avoid a 'planned tour' or 'guided tour' atmosphere.... we can still provide historical information to individuals and/or groups as long as we keep it informal, we do not advertise, and we do so on a random basis.¹⁶

Also in 1993, the operators of the island ferry service requested permission to conduct guided tours of the village historic district. The NPS advised them that they were to provide only "limited, informal, non-advertised, non-scheduled, historical information on the boat ..."¹⁷

¹⁴ Robert Brodbeck, "Dune Dreams: Northern Michigan's National Lakeshore Creates Memories that Last a Lifetime," Michigan Living 18(10): 18 (1999).

¹⁵ Rita Hadra Rusco, North Manitou Island: Between Sunrise and Sunset (n.p.: Book Crafters, 1991).

¹⁶ Assistant Superintendent, to Chief, Interpretation and Visitor Services; Chief, Resources Management and Visitor Protection; Island District Ranger, Assistant Chief Naturalist, Historic Architect, 13 August 1993, Sleeping Bear Dunes National Lakeshore, Empire, Mich.

¹⁷ Ibid.

These instances suggest that the intended visitor experience neither reflects the character of the island landscape, nor the natural curiosity that is aroused in visitors when they experience it. The island's historic buildings and other structures provide visitors with emotionally meaningful aesthetic experiences. Consequently, the park has received offers of volunteer labor, materials, and money from groups and individuals. One man offered to stabilize the Swenson barn located on the west side of the island. He wrote:

... I look at this as an opportunity to give to my sons the same sense of discovery and connection with the past that I had the first time I came upon the old barn. 18

The park refused his offer, stating that "while the sense of discovery at finding a foundation will not be the same as finding the entire barn, this is what is intended for Swenson's for future generations." 19

Clearly, many visitors are confounded by the nature/culture dichotomy reflected in the North Manitou DCP/IP, and the agency's neglect of the island's cultural resources and human history. For many visitors, evidence of former human habitation is not incompatible with wilderness values. Wrote a visitor from Wayne, Pennsylvania: "Preserving these buildings and their history is as important as establishing the islands as wilderness areas. Furthermore, I do not think these two goals are mutually inconsistent." A couple from Chicago echoed these sentiments:

The island is full of natural beauty and fascinating architecture. The history of the island was particularly interesting, especially the logging era. Someone told us that many or all of the homes on the island are targeted for demolition. If this is true it will be a tragic loss for the island and the people who visit North Manitou.... We believe that many people like us would find the buildings as interesting as the environment in which they are situated."²¹

Another visitor went even further, suggesting that cultural resources were not only compatible, but integral to the wilderness experience on the island: "I can't help but wonder why these buildings are not being preserved.... These buildings are part of the wilderness that is North Manitou!"²²

Comments such as these express a conception of wilderness that differs markedly from that articulated in the Wilderness Act of 1964 and related NPS management policies. In places like North Manitou Island, where the landscape discloses a rich legacy of human history, traditional NPS wilderness management policies fail to account for the reality of the landscape, and fail to correspond with visitors' experiences, perceptions and values. More importantly, the suppression of the island's human history, an implicit goal of NPS wilderness management policies, has obscured the connections between natural and cultural systems. This tendency neither adequately acknowledges the value of cultural resources, nor reflects

- ¹⁸ John Hiben to Superintendent, Sleeping Beard Dunes National Lakeshore, 23 July 1993, correspondence files, Sleeping Bear Dunes National Lakeshore, Empire, Mich.
- ¹⁹ Superintendent, Sleeping Bear Dunes National Lakeshore, to John Hiben, 28 July 1993, correspondence files, Sleeping Bear Dunes National Lakeshore, Empire, Mich.
- ²⁰ George Wellman to [Superintendent], Sleeping Bear Dunes National Lakeshore, 27 August 1993, correspondence files, Sleeping Bear Dunes National Lakeshore, Empire, Mich.
- ²¹ Joan and John Herron to Superintendent, Sleeping Bear Dunes National Lakeshore, 25 August 1993, correspondence files, Sleeping Bear Dunes National Lakeshore, Empire, Mich.
- ²² Kim Beals to Superintendent, Sleeping Bear Dunes National Lakeshore, 26 October 1993, correspondence files, Seeping Bear Dunes National Lakeshore, Empire, Mich.

the ways in which visitors experience the island's landscape. Perhaps wilderness is a more vague idea that the policies assume.



What kind of wilderness landscape is North Manitou Island? If one employs the definition of the Wilderness Act of 1964—that is, a place where "the earth and its community of life are untrammeled by man [sic]" and where "the imprint of man's [sic] work is substantially unnoticeable,"—then it is clear that North Manitou is not a pristine example.²³ Returning to Carl Sauer's definition of a cultural landscape as a natural area modified by human culture over time, it is apparent that even the description of a "potential wilderness" contained in the Wilderness Act of 1964 describes a cultural landscape. Furthermore, we have pointed out how wilderness itself is a cultural construction.

Today, North Manitou Island is no less a cultural landscape than it was eighty years ago when its forests, farm fields, and fisheries supported a population of several hundred residents. However, North Manitou is now a cultural landscape that is managed as if it were wilderness. In our minds, it occupies an ambiguous middle ground between humans and wild nature. In mediating between humans and nonhuman nature, it is akin to a garden, but a garden that is tended in a peculiar manner. It is a wild landscape that has been transformed by human activities and ideas—made to fit within prevailing attitudes about the human relation to nature, made "comfortable."

If interpretation of North Manitou Island as an untouched wilderness is delusive, how should we instead perceive it? North Manitou Island is not an ideal wilderness, but neither is it a stable, intact cultural landscape that is being maintained through traditional human activities. Many of its cultural features are in decline, slowly disappearing due to decades of abandonment and neglect. This is hardly a museum landscape. Rather, North Manitou Island is a cultural landscape undergoing a peculiar yet familiar form of transformation; indeed, it might be considered a ruinscape.

Most the island's "cultural resources"—namely, its buildings and landscapes—exist in a physical condition that is deteriorated beyond the point of restoration. As the historic landscapes of the past decay, a different sort of cultural landscape emerges. This new landscape is no less a product of human values and attitudes toward nature and the land. In this respect a wilderness such as North Manitou Island is no different from other types of cultural landscapes. It does, however, certainly possess peculiar characteristics and idiosyncrasies. As a ruin, the landscape embodies aesthetic qualities that are capable of inspiring varied emotional and intellec-

²³ Wilderness Act of 1964, U.S. Code, vol. 4, title 16, sec. 1131(c) (1970).

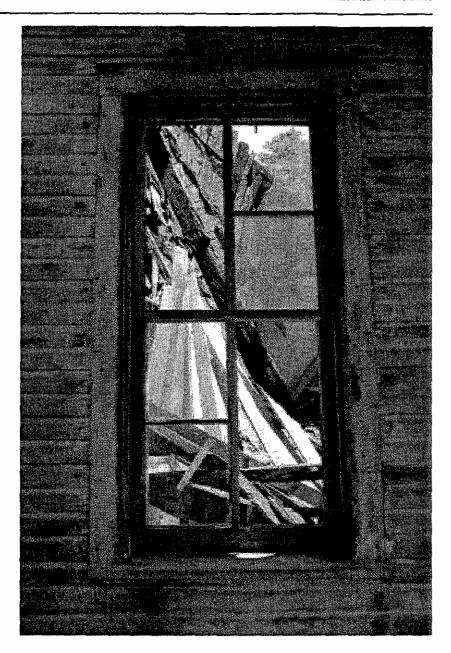


Figure 7.3. Ruins betray the extent to which landscapes are dynamic settings, endlessly modified by forces of non-human nature acting through time. Ruins show both human endeavors and non-human processes to be powerful agents of environmental change.

tual responses. Ruins stand for the binary opposites of life, growth, and progress. By embodying regressive change, ruins resist attempts at preservation. They make the transformative power of nature and time visible and palpable (figure 7.3). This may be why we find ruins to be both disconcerting and fascinating at the same time.

Like "wilderness" landscapes, ruins are complex artifacts that possess meaning on multiple levels and evoke emotions that are both personal and bounded by long-standing cultural traditions. Ruins may be valued simultaneously for their associative, aesthetic, and didactic attributes. Intellectual interest in ruins extends back to the Enlightenment, and the rediscovery of surviving vestiges of ancient Roman and Greek civilizations during the Renaissance. Ruins represented tangible evidence for understanding past cultures. Engaged in a process of intuitive analysis, scholars examined ruins for clues to the history and character of vanished civilizations. By the late seventeenth

century the study of ruins and other antiquities was being approached as an empirical, scientific discipline.²⁴ The ability of ruins to reveal information about the past through standardized, objective observation contributed to the development of the discipline of archaeology. Ruins, however, are not merely documents of the past for detached, empirical study. Over many centuries they have become highly charged with subjective, associative, and aesthetic meanings as well.

Landscapes featuring architectural ruins were a common theme in painting, literature, aesthetics, and landscape architecture during the eighteenth and early nineteenth centuries. Fascination with the processes and effects of architectural decay was so pervasive during this time that several historians have referred to the phenomenon as the "cult of the ruin." Artists and poets celebrated the accumulated effects of the gradual destruction of buildings by nature in time. Landscape historian John Dixon Hunt states that ruins were considered to be a "prime ingredient" of any picturesque view, especially during the last half of the eighteenth century. Ruins represented a harmonious integration of human artifice and nature, and the processes of time and nature provided it with the desired aesthetic properties of roughness and irregularity (e.g., broken and rough surfaces).

In England, garden designers sought to "improve" landscapes by incorporating ruins into views. Where no ruins existed,
they were sometimes purchased and moved onto a property. In other
cases, artificial ruins were constructed, along with artificial, "ruined" elements of nature—dead trees and fragments of tree
trunks.²⁷ William Gilpin, an artist and critic of landscapes and
landscape art, valued ruins as "sacred" things possessing "a sort of
melancholy pleasure."²⁸ Gilpin preferred ruins, especially ruined
castles, to cottages, Greek temples, and other embodiments of
human artifice because, through time, ruins had become merged
with the landscape. They had become "naturalized." Furthermore,
the process of natural decay imparted to ruins the characteristics of
roughness and irregularity. The picturesque tradition thus bonded
the ruin with aesthetic pleasure.

Beyond aesthetic considerations, ruins possessed important associative qualities. Ruins were thought to stir the imagination. The viewer was invited to imagine the former inhabitants and to ponder events that took place in the past. Probing even deeper, the ruinscape invited the observer to "explore ideas concerning the transience of time and its decaying effects on man's greatest accomplishments." Contemplation of ancient ruins inspired Constantin François Chasseboeuf Volney's Ruins, or Meditations on the Revolution of Empires, which elevated ruins into universal symbols of the philosophy of history. "Do thus perish then the works of men—thus vanish empires and nations?" asked Volney after pondering the ruins of ancient civilizations. Onliney's survey of human history led

²⁴ Stuart Piggott, Ruins in a Landscape: Essays in Antiquarianism (Edinburgh: University Press, 1976), 20.

²⁵ See John Dixon Hunt, Gardens and the Picturesque: Studies in the History of Landscape Architecture (Cambridge, Mass.: MIT Press, 1992); David Lowenthal, The Past Is a Foreign Country (Cambridge: Cambridge University Press, 1985); David Watkin, The English Vision: The Picturesque in Architecture, Landscape and Garden Design (New York: Harper and Row, 1982).

²⁶ Hunt, Gardens and the Picturesque, 179.

²⁷ Watkin, English Vision, 48.

²⁸ Ibid., 64.

²⁹ Megan E. Soske, Scenic Views: Eighteenth-century Landscapes, Ruinscapes, and Cityscapes: Selections from the Indiana University Art Collection (Bloomington, Ind.: Indiana University, 1996), 14.

³⁰ C.-F. [Constantin-François] Volney, The Ruins; or, Meditation on the Revolutions of Empires: and The Law of Nature, (New York, Peter Eckler Publishing Co., 1926 [1791]), 7.



Figure 7.4. A woman poses near a ruined log structure, possibly a former homesteader's cabin, on North Manitou Island, ca. 1900.

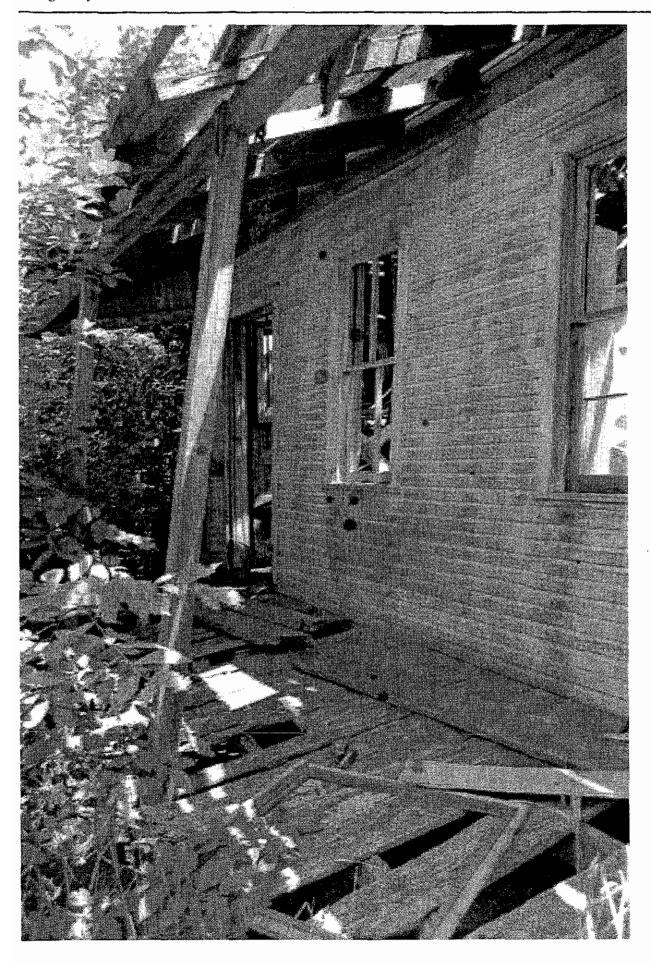
him to conclude that "man is made the architect of his own destiny," and to warn that the lessons of times past may be repeated in the present.³¹

Landscape archaeologist Julia King has shown that American attitudes toward ruins during the nineteenth century mirrored those that prevailed in Europe. Although the American landscape possessed no ruins on a scale of those that abounded in Europe, Americans nonetheless valued architectural ruins for historical associations, as embodying "lessons of history." King found that during the nineteenth century, inhabitants of southern Maryland retained certain architectural ruins in the local landscape as visible links with the past. Archaeological and documentary evidence revealed that many architectural ruins were left standing largely because they served as palpable, mnemonic landmarks. Ruins gave a tangible quality to the abstract concept of the past. Historic photographs suggest that a similar situation existed on North Manitou. Even a century ago, island visitors were attracted to evidence of previous human habitation and enterprise (figure 7.4).

During the eighteenth century and throughout much of the nineteenth century, ruins represented the harmonious fusion of the works of humans with natural processes. Although romantic attitudes persist, a countervailing perspective is apparent today. The contrasting view stems from a recognition that humans are not always agents of progressive change, that our relationship with non-human nature is not always harmonious. This notion has been especially potent during the later half of the twentieth century. Thus, a ruin that exists as part of a "natural" or "wild" setting may be viewed not as a harmonious integration of humans and nature, but as evidence of the destructive effects of past human endeavors. The latter point of view is evident in the language of the Wilderness Act of 1964, whereby "natural condition" is defined in opposition to human civilization: a wilderness area "generally appears to have been affected primarily by the forces of nature, with the imprint of

³¹ *Ibid.*, 21.

³² Julia A. King, "The Transient Nature of All Things Sublunary." Romanticism, History, and Ruins in Nineteenth-century Southern Maryland," in R. Yamin and K. B. Metheny, eds., Landscape Archaeology: Reading and Interpreting the American Historical Landscape (Knoxville: University of Tennessee Press, 1996), 249-72.



man's [sic] work is substantially unnoticeable."³⁴ The ruin, or other "imprint of man's work," becomes a blight that must be removed if the aesthetic ideal of wilderness is to be restored.

Figure 7.5 (opposite page). Front porch of the farm house built by Paul and Josephine Maleski, 1997.

It is clear that both aesthetic traditions coexist today. NPS wilderness management policies clearly reflect a conflicted, if not wholly ambivalent, attitude toward cultural elements, or "examples of man's presence." On North Manitou Island, cultural landscapes such as the Bournique place initially were considered to be inconsistent with "wilderness values." They were described not as picturesque ruinscapes, but as "visual intrusions." Accordingly, the NPS proposed to remove all of the structures and other human-made features from the site. The agency later determined that removal of the structures would severely disrupt natural systems, and subsequently revised its plan to allow the structures to remain in place and deteriorate "naturally."

Most of the other extant structures on the island also were proposed to remain as part of the wilderness as "moldering ruins." Although this management decision was made primarily because of economic and logistical constraints, it was justified, in part, on aesthetic grounds. The NPS conceded that retaining "visual intrusions" in a wilderness area allowed them to function as "discovery sites" for park visitors. This apparent compromise of "wilderness values" acknowledged the aesthetic legacy of eighteenth-century picturesque landscapes, in which "moldering ruins" are valued for their aesthetic and associative attributes—their ability to stir the imagination.

The compromise solution adopted by the NPS suggests the extent to which both aesthetics—wilderness and the picturesque—coexist. So, too, do the experiences of visitors who come upon the "discovery sites" of North Manitou Island. Both aesthetic attitudes are expressed eloquently in this account of journalist Mark Stone's encounter with the ruins of the Adam and Mary Maleski farm on the northern end of the island (figure 7.5):

With little effort, it was easy to piece together what had once been: the approximate extent of the fields and pastures, the rise of an old barn foundation, all posts that once fenced the garden from deer, and, at the other end of the clearing behind a row of blooming lilacs and scattered fruit trees, the once-upon-a-time Maleski home.

The building had lost some of its glory in decay, but not its character. I could see the Maleski's sitting on the now rotted and broken porch. Through the broken panes, Mrs. Maleski's kitchen was now lit by the gaping holes in the caved-in roof. Around the home, a few outbuildings tilted into thickets of overgrowth and vines. Here and there were the rusted horse-drawn implements of the farm operation.

³⁴ Wilderness Act of 1964, U.S. Code, vol. 4, title 16, sec. 1131(c) (1970).



Figure 7.6. Ruins like the dilapidated Katie Shepard dining room inspire reflection about processes of nature and time, and the place of human history in "wilderness" landscapes. In Western culture, ruins draw on both modern and centuries-old aesthetic and associative traditions.

How long, I wondered as I headed back into the trees at the other end of the clearing, would it take for nature to remove all traces of the Maleskis from this spot—10 years, 20 years, 50 years? What do the Maleski descendants feel when they visit this place?

They will return to find the beauty of their homestead replaced with a beauty of another sort."35

Stone's interpretation of the Maleski house ruin reflects the "sort of melancholy pleasure" that is the aesthetic legacy of the eighteenth-century ruinscape. Competing with this romantic view, however, is Stone's anticipation of a "beauty of another sort," which is, of course, the beauty of wild nature—the equally romantic aesthetic of wilderness, where "the imprint of man's [sic] work is substantially unnoticeable." In Stone's account we encounter the central paradox of "wilderness" landscapes such as North Manitou Island—that one's appreciation of non-human nature actually is heightened by the obvious presence of human-made artifacts in the landscape. Rather than spoiling the view, "imprints of mankind" indeed may make one more aware of the transformative and, in some cases, regenerative power of nature (figure 7.6). To do so, of course, ruinscapes make use of (and depend upon) the conceptual dichotomy between humans and nature, but in so doing they also point toward the connections and the extent to which the two concepts are interconnected.

³⁵ Mark Stone, "Sweet Isolation: The Pristine Quietude of North Manitou," *The Gazette* (Elk Rapids, Mich.) 5(2): 21-22 (June 24, 1994).

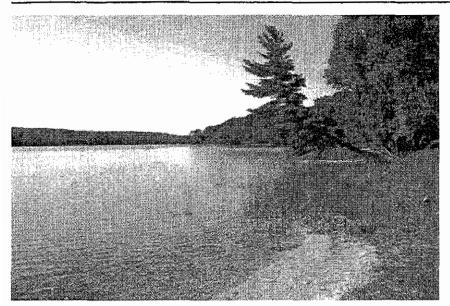


Figure 7.7. Eastern shore of Lake Manitou, 1997. In many environments, traces of human history are easily obscured. In such places it is easy to forget that even landscapes that appear utterly wild are, to a certain extent, cultural constructions.

In settings such as North Manitou Island it is easy to forget that we inhabit a place that has a human history (figures 7.7 and 7.8). Amidst such natural beauty and solitude it is easy to believe that the island is a place that has remained little-touched and unsullied by human enterprise. It is easy to imagine this place as a mythic, timeless, island wilderness. The presence of ruins, however, dispels the myth of timelessness, and the myth of stability. From the day a building is constructed, nature begins to transform it. Surface materials are weathered and eroded, and the process of returning the edifice to the earth begins. The same can be said of the elements of non-human nature—plants and animals and rocks.

The weathered buildings of abandoned North Manitou farmsteads, the overgrown shrubs, and the rows of old wooden fenceposts and twisted wire, now partially buried by dunes of shifting sand, all speak eloquently of the passage of time, cycles of nature, and the transience of human habitation on the island. Ruins and other evidence of past human habitation provide visitors with a extraordinary vantage point from which to consider the world around them and their place in it. Situated on a cusp of space and time, these elements solicit contemplation of one's relationship to place, history, and nature. This sort of evocative power is characteristic not of wilderness, but of ruinscapes. We cannot deny that there is spiritual power in nature. We can marvel at a world that humans did not create. But we also must recognize that we are part of that world.

The interpretive agenda codified in the North Manitou Island DCP/IP, and rooted in the NPS conception of wilderness, portrays North Manitou as a place that exists largely outside the human

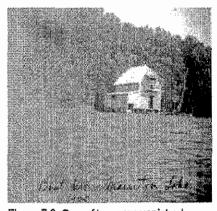


Figure 7.8. One of two now-vanished boathouses that stood along the eastern shore of Lake Manitou during the early 1900s.

Figure 7.9. Dock and wharf, north Manitou Village, ca. 1910s. Although it is a place of spectacular natural beauty, North Manitou Island is not a wilderness landscape that has remained untouched by human activities. The extent to which past human endeavors have "spoiled" the island depends on one's understanding of such places as cultural landscapes.

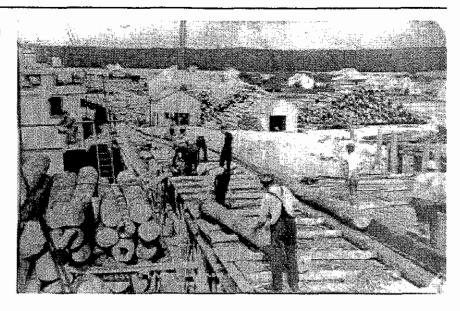




Figure 7.10. Aformer logging road that now functions as a hiking trail, North Manitou Island, 1997.

realm—a resource that is inspirational precisely because it has remained unspoiled by human endeavors and because it now is set aside and forever protected from damaging human influences. This report presents an alternative view: a portrait of North Manitou Island as a landscape that bears marks of a rich and varied human history (figures 7.9 and 7.10). Rather than discounting NPS conceptions of the island as inaccurate or misinformed, we might instead see them as a reification of North Manitou's reputation as a timeless, primeval wilderness landscape. The NPS vision reflects a long-standing interpretive tradition, and a familiar outlook that did not originate with the agency. As a continuation of a cultural tradition, the "wilderness" interpretation of the island landscape is no less valid, no less "true," than our alternative view. Indeed, reification of the wilderness myththe island's reputation as a place where "nothing happened"—also is an important facet of its human history. It reflects an important dimension of our cultural heritage, but more importantly the wilderness myth also explains the North Manitou landscape as it exists today. It is an essential part of the island's human history, and perhaps the very idea of wilderness has been the most powerful cultural force to affect the North Manitou landscape during the twentieth century.

Should interpretation of the North Manitou Island landscape continue as planned in the DCP/IP? The current interpretive approach denies the extent to which the island's natural history is interwoven with human history. Furthermore, it does not reflect the experiences of many island visitors. The cultural landscape of North Manitou Island provides a richer, more interesting, visitor experience than the "primitive experience" described in the current DCP/IP. By fully acknowledging the island as a cultural landscape that possesses spectacular natural features and beauty and vestiges of a rich and unique human history, the NPS may actually enhance the quality of visitors' experiences and foster encounters that emphasize "solitude, a feeling of self-reliance, and a sense of exploration."

Unfortunately, traditional NPS planning procedures and management strategies seem ill-equipped to acknowledge cultural landscapes of the sort that predominate on North Manitou (i.e., "ruinscapes"). Compared with other types of resources, current NPS management policies have little to say about the treatment of ruins, especially ruins associated with historic-era, non-native (e.g., Euro-American) cultures. Most of the common treatment interventions are aimed at preserving archaeological information that may be contained in a ruin, rather than exploiting its aesthetic and didactic potential as a landscape element. Ruins, perhaps more than other types of artifacts, resist preservation. By embodying regressive change, ruins make transition visible, tangible, palpable. Ruinscapes are inherently transitory environments.

Conventional management and interpretation schemes cannot be applied readily to the kinds of ruinous vernacular land-scapes that now characterize North Manitou Island. Such land-scapes cannot be "restored" to earlier, historic forms. Furthermore, they cannot be interpreted in the manner that is typical of restored, museum environments. Significant pieces of the dominant historical narrative (e.g., nineteenth-century subsistence farming) have been lost in ruinscape environments, replaced by competing storylines (e.g., ecological succession). The ruin amidst wilderness invites an observer to invent her own narrative, to create her own plausible explanation and story. Yet the themes and plot line are suggested best by the environment itself. And the themes certainly have to do with nature, time, and humanity.

Landscape ruins suggest that all environments are inherently transitory, and they are so because we are part of them. They exist outside of us, and within us—embedded in stories, postcard snapshots, scientific theories, personal memories, and poems (figure 7.11). Our landscapes change us as surely as we change them. In looking at landscapes like North Manitou, we may adopt a more "biocentric" point of view, but it is still a human view. In labeling such places as natural, largely devoid of cultural significance and meaning, we fail to fully acknowledge, and take responsibility for, our place in them. A heightened sense of environmental awareness, then, is the largely untapped interpretive potential of North Manitou Island. Indeed, it is the interpretive potential of much of the Sleeping Bear Dunes National Lakeshore.

The recommendations presented in this report are aimed at moving landscape management and understanding on North Manitou closer to the approach articulated in the Sleeping Bear Dunes National Lakeshore GMP, which emphasizes "human adaptation to and influence on the natural environment" and "the linking of past, present and future"—themes that were central to Carl Sauer's initial conceptualization of the cultural landscape. The NPS commitment to a wilderness ideal has unnecessarily constrained management options for both cultural and natural resources on North

All the first care than the first care the first ca

Figure 7.11. Postcard image of a painting of landscape scenery at Lake Manitou, ca. 1900. Such renderings betray a landscape as both object and subject, shaped by human actions and defined by human ideas.

Manitou Island. An alternative approach might treat the island as a wilderness park, a place that is purposefully celebrated as a setting for interacting with elements of non-human nature and vestiges of past human culture. Instead of regarding the island as a wilderness land-scape that is marred by "visual intrusions," the NPS might present it as a cultural landscape that offers visitors a unique opportunity to explore the human relationship to nature.

What are the practical implications of this shift in perspective? To begin with, the island's human history should be acknowledged, not ignored or downplayed. Ruins and other cultural resources, whether structures or landscapes, are important elements of the visitor experience on North Manitou. Ruined farmsteads and other elements should be unapologetically "interpreted" as part of the visitor experience. This does not mean that human history should be the focus of the visitor experience, however. Rather, the human history embodied in the island's dunes, forests, lakes, and wildlife should be added to the picture. Accurate historical information should be accessible to visitors, but the interpretive program need not depend upon intrusive wayside exhibits or museum displays. Visitors should be encouraged to explore the island's cultural landscapes on their own.

The approach advocated here does not invalidate the restoration of cultural elements, or the conservation of natural systems on the island. Resources like the U.S. Life-Saving Station and Cottage Row clearly possess a cultural significance that justifies more intensive (i.e., traditional) preservation and interpretation. Likewise, protection of piping plover and pitcher's thistle, and vigilant preservation of sensitive habitats, are worthwhile management objectives. While not abandoning our obligation to respect and conserve non-human nature, this report recommends a shift in attitudes that is most clearly manifest in the way the island landscape is conceptualized, and the way in which it is interpreted to the public.

³⁶ Department of the Interior, National Park Service, General Management Plan: Sleeping Bear Dunes National Lakeshore, Michigan (Denver: Department of the Interior, National Park Service, October 1979), 5. An island can easily become a place of escape, a world apart, sealed off from the enervating influences of modern, human civilization. Many people long to feel as though they are the first human beings to hike along a certain stretch of beach, or to cross a cold-running stream, or to ponder a bloom of milkweed slowly swaying in a late summer breeze. Many of us struggle to come to terms with our respect for wild, non-human nature, and our felt connection to human history, our yearning for understanding about times and lives past. A landscape like North Manitou Island could be a place for doing that—a place for questioning, and reconciling, our own conflicted relationships with our past, with each other and the natural world.

How do we tend a "comfortable wilderness"? Perhaps we could begin by recognizing that wilderness needs ruins. It depends upon them, and other evidences of human habitation, for much of its meaning, for we can only define wilderness in relation to human culture—in relation to ourselves. Vestiges of human habitation prompt us to ask questions about our place in nature—questions about how the natural world has shaped patterns of human life in the past and the present. They reveal shifting attitudes toward nature—how people have perceived non-human nature and attached complex meanings and values to elements of the world around us. Finally, they help us contemplate the peculiar ways in which humans reshape landscapes, and how those landscapes in turn inspire us. Preserving vestiges of human culture on a remote island like North Manitou may be a step toward coming to terms with our past, and envisioning possible futures—a step toward achieving the kind of adaptation to environment that Sauer defined as "the feeling of harmony between the human habitation and the landscape into which it so fittingly blends."37

³⁷ Carl Sauer, "The Morphology of Landscape," in Land and Life: A Selection from the Writings of Carl Ortwin Sauer, ed. John Leighly (Berkeley, CA:

Appendix A

Research Methodology and Sources

The findings and interpretations presented in this report were drawn from a diverse array of sources, encompassing personal memoirs, historic photographs and maps, government reports and planning documents, census records, legal documents, oral history interviews, and secondary historical accounts, as well as the island's relict material culture. Most of the primary archival repositories were located in Michigan, and included the collections of the Sleeping Bear Dunes National Lakeshore in Empire, the Leelanau County Historical Museum in Leland, the Library of Michigan and the State Archives of Michigan in Lansing, and the Bentley Historical Library in Ann Arbor. Other repositories included the State Historical Society of Wisconsin, and the Chicago Maritime Society. In addition, the private collections of two former North Manitou residents, Rita Hadra Rusco and Paul Maleski, Jr., were consulted. Field investigations were carried out during the summers of 1996 and 1997. A few key types of manuscript sources are discussed individually below, followed by general remarks on other unpublished documents. These are followed by notes on other primary and secondary sources.

Census Records

Manuscript census schedules are available for certain years during the nineteenth and early twentieth century. The decennial censuses certainly do not fully capture the island's "boom-or-bust" development pattern, but they nonetheless provide partial, periodic glimpses of the demographic composition of the island's human population. For the years 1860, 1870, and 1880 the federal census of agriculture provides specific data on North Manitou farms. Unfortunately, much of the 1890 U.S. Census data was destroyed by fire. Aggregate

(township) population data from the 1890 census are available in published form, but there are no separate population statistics for North Manitou Island. For the 1900 census the island was incorporated into the Leland Township manuscripts, and it is difficult to identify North Manitou residents with absolute certainty. In contrast, the 1910 and 1920 manuscripts clearly distinguish the island's inhabitants from other township residents.

The state of Michigan collected its own statistics on agriculture and industry throughout much of the nineteenth century for years ending in four. However, it is not possible to extrapolate specific information about North Manitou Island until the 1894 census, and after that census North Manitou statistics were incorporated into aggregate numbers for Leelanau County. Most of the statistics from the 1894 state census apply to both North and South Manitou islands together. For example, statistics for cultivated land, poultry, cereal crops, garden vegetables, and fruits were combined for both islands. Separate data are given for livestock and fisheries. Still, it is possible to conceptualize the general context of North Manitou Island agriculture from these data. The tables in Appendices C and E summarize the federal population and state agriculture censuses for which North Manitou-specific data can be discerned.

Homestead Records

Enacted in 1864, the Homestead Act legislatively established a mechanism for the efficient dispensation of public lands to aspiring agriculturists. Individuals who acquired land under provisions of the Homestead Act were required to file various documents with regional federal land offices, which functioned under the auspices of the U.S. Treasury Department. The original documentation filed by claimants subsequently was transferred into the National Archives and Record Service in Washington, D.C. where it currently is available to the public. Although the level of detail varies, these documents often provide detailed information about a claimant's ethnic or cultural heritage, his (or, infrequently, her) age and familial status, and the various "improvements," such as buildings or cultivated land, that had been made on the property. Perhaps the most useful homestead data pertains to buildings, the amount of cleared land, and personal information about the claimant, the kinds of crops cultivated, and animals, because few other sources exist that provide this data with such specificity. In addition, such information may allow insights into general agricultural activities and practices within the larger community. Appendix D summarizes the characteristics of North Manitou's homestead farms, as described by claimants in official homestead documents. Homestead records were located for nine claimants on North Manitou Island. Documents for two homesteaders, Nels Carlson and Lars Christian, were not located.

Land Records

Records indicating the first purchasers of land within the surveyed public domain are held in the State Archives of Michigan in Lansing. The authors utilized microfilm copies of these records, which for each parcel gave the name of the purchaser, and the method of acquisition (e.g. homestead, military bounty, etc.). In addition, this information is found in table form in the "History Data Report" written by NPS historian David L. Fritz. The official Leelanau County deeds records held at the courthouse in Leland, Michigan, also were utilized to document key land transactions.

Other Manuscripts

Manuscript materials were utilized from three repositories: the archives of Sleeping Bear Dunes National Lakeshore, the Bentley Historical Library, and the Leelanau County Historical Museum. The SBDNL archive contains several linear feet of manuscript materials that originate from the Manitou Island Association and the William R. Angell Foundation. Most of these materials were donated to the lakeshore by a former Angell Foundation trustee. The documents include official Angell Foundation memorandums and correspondence, copies of reports about the MIA deer herd and archaeological resources on the island, and an MIA general accounts ledger for the period autumn 1924 through 1929. In addition to this important collection of historic materials, the administrative files of the SBDNL include copies of court documentation relating to NPS condemnation proceedings, reports on natural and cultural resources, official public comment documents, and unsolicited comments from park visitors.

The papers of Arthur J. Lacy, William R. Angell's personal attorney, are located at the Bentley Historical Library. The Lacy papers contain documents relating to the establishment of the Angell Foundation, minutes from foundation meetings, and copies of the two trust instruments that Angell created to hold the assets of the Manitou Island Association. Other items in the Lacy Collection corroborated evidence drawn from the MIA Collection at SBDNL. Lastly, the Betty Kramer Collection of the Leelanau Historical Museum contains several useful sources, including personal recollections of Shirley Foote Alford and Josephine Hollister, newspaper clippings, and miscellaneous items relating to the Newhall, Manitou Island Association, and Angell Foundation eras.

Pictorial and Cartographic Information

Photographic documentation of agriculture on North Manitou Island is scant. The authors located useful images in the personal photograph collections of former North Manitou Island residents Rita Hadra Rusco and Paul Maleski, Jr., and in the archival collections of the Bentley Historical Library, the Chicago Maritime Society, Leelanau Historical Museum, and Sleeping Bear Dunes National Lakeshore (SBDNL). Probably the best assemblage of North

Manitou Island photographs, in terms of historical themes, physical condition, and image quality, is the collection of Newhall family photographs held by the Chicago Maritime Society. The photographs were donated to the society by descendants of John Newhall. They are contained in five bound scrapbooks, and represent views taken during the Newhall family's tenure on the island, roughly 1897 through the early 1920s. The collection includes images of Newhall family members, friends, employees, farm scenes, and views of Cottage Row, logging activities, and natural features. In addition to a small number of photographs depicting the Newhalls' agricultural activities, the collection contains several images of other North Manitou farms.

Certainly in terms of chronological breadth, range of subject matter, and historical themes, the best overall assemblage of island photographs is the personal collection of Rita Hadra Rusco. Rusco assembled her collection during many years of residency on the island, and as part of her effort to document the island's history. The photograph collection represents her love for the island and her deep appreciation of those who resided on the island before her. Rusco graciously shared her collection with the authors on several occasions. Rusco's collection was especially valuable for this study because it contains several images depicting agricultural practices and landscapes on North Manitou Island (which are themselves few), including some that are not represented in other collections. Another former island resident, Paul Maleski, Jr., also loaned his collection of family photographs. These were useful in understanding the history of one of the island's most important farm families.

In addition to the personal collections noted above, the archive of Sleeping Bear Dunes National Lakeshore includes an assortment of over ninety photographic images of North Manitou Island. The NPS has gathered these images from various sources, including donations from former island residents. Compared with other areas of the lakeshore, North Manitou Island agriculture is not well represented in the SBDNL collection, and many of the images that exist are of poor quality. The Randa Frederickson Collection of the Bentley Historical Library includes a small set of historic photographs, most of which depict various logging activities on the island during the early twentieth century. The Bentley's postcard collection also includes North Manitou scenes that depict logging, the village post office and store, the lighthouse, and the maiden voyage of the island's mail boat. A final archival source of photographic images is the Leelanau Historical Museum in Leland., which holds a small collection of photographs depicting a range of activities on the island. Several of these are not represented in other collections. The museum's Betty Kramer Collection of also contains a few views of North Manitou dating from the late nineteenth and early twentieth centuries.

In addition to historic photographs of island scenes, several sets of aerial photographs of the island, or portions thereof, were utilized. The oldest and most useful set of historic aerial images was produced by the U.S. Department of Agriculture in 1938. Largeformat black-and-white prints of these photographs were acquired from the National Archives and Record Service. Although the resolution of many of these photographs is not optimal, they provide a historical baseline for assessing macro-level landscape change (e.g., changes in general patterns of vegetation, the size and shape of clearings, etc.; the scale and clarity of the photos generally does not permit the identification of specific buildings or small landscape features). Similar information was drawn from a set of twenty blackand-white aerial photographs dating from 1952, a series of aerials from 1971, eight infrared aerial photo color transparencies from the 1980s, and a 1995 series of color slides depicting aerial views of North and South Manitou islands.

Few detailed historic maps of the island were located. The MIA Collection at Sleeping Bear Dunes National Lakeshore included a plat map of the North Manitou Village area dating from the 1910s, a ca. 1950s insurance map of the same vicinity, and several historic plat maps of the island, most dating from the mid-1920s through the 1950s. Current cartographic information was obtained from the U.S. Geological Survey "North Manitou Island" quadrangle map, and from a map produced by Rita Hadra Rusco and Gina Olejarczyk. Jean (Londergan) Lundquist shared a truly unique map of the island. The map was created by Eleanor Lampman, wife of Dr. Harold Lampman. The Lampmans were personal friends of William Angell and the Londergans, and spent time on the island during the 1940s and 1950s. Eleanor Lampman's map portrays the cultural landscape of the island as it was experienced by North Manitou's summer residents during that time. The hand-painted map includes trails, roads, and natural and cultural landmarks, which are colorfully denoted by small pictograms or emblems. As Jean Lundquist related, each emblem represented a familiar island site and the "stories" associated with it.

Newspapers

Microfilm copies of Leelanau county newspapers were researched at the Library of Michigan in Lansing. The research was not comprehensive or systematic. Rather, a reconnaissance approach concentrated on certain periods for which other documentation was scarce (e.g., the late 1880s through the 1890s). Coverage of events on North Manitou was not extensive in the mainland newspapers. Nevertheless, the papers yielded anecdotal information, and confirmed events documented by other sources. In addition to the collection at the Library of Michigan, the Leelanau County Historical Museum's Betty Kramer Collection included several noteworthy newspaper clippings,

and the administrative files of Sleeping Bear Dunes National Lakeshore contained a number of articles pertaining to NPS acquisition and management of the island.

Oral History Interviews

The authors conducted oral history interviews with former island residents Rita Hadra Rusco, Paul Maleski, Jr., and former summer resident Jean (Londergan) Lundquist. Notes from interviews with Rusco, Maleski, and Lundquist are on file at Sleeping Bear Dunes National Lakeshore. In addition, SBDNL loaned audio and video tape recordings of previous interviews with Paul Maleski, Jr. The authors also utilized the oral history collection of the Leelanau County Historical Museum, which contained audio tape recordings of a 1993 interview with former North Manitou resident Vera Crites Goos.

Previous Inventories

North Manitou Island's cultural resources were documented systematically in 1979, and again in 1994. The island's buildings and structures were inventoried at a reconnaissance level (i.e. without intensive historical and/or contextual research) in 1979 by Shunichi Hagiwara, a graduate student at Michigan State University. Hagiwara's survey was sponsored by the NPS, in cooperation with the Michigan State Historic Preservation Office, and was intended to record all of the extant structures on the island at that time. Although the Hagiwara's inventory somehow omitted the MIA sawmill, most of the island's buildings were photographed, and basic location and materials data were noted on small inventory cards. The 1979 survey data provide a baseline for evaluating environmental change over the ensuing two decades. The NPS List of Classified Structures (LCS) inventory was undertaken fifteen years later, during the summer of 1994. Original LCS photographs and field notes are on file at the office of the NPS, Midwest Field Area, in Omaha, Nebraska.

Field Reconnaissance Surveys

Relict roads, paths, clearings, buildings, architectural ruins, and cultivated plants, reveal the extent and character of agricultural practices on North Manitou Island from the 1850s through the 1950s. Cultural features at former agricultural sites were documented with black-and-white photographs and, in some cases, color slides. Sites with significant cultural features were documented with measured drawings. Landscape features, extant buildings, and architectural remnants were located via triangulation.

Secondary Historical Accounts

Because primary documents relating to the history of North Manitou Island are scarce, this study utilized a number of secondary accounts. Foremost of those were the memoir and island history published by Rita Hadra Rusco, and the "History Data Report" prepared by NPS historian David L. Fritz. Rusco's book, Between Sunrise and Sunset,

relates not only her personal experiences of life on the island during the 1940s, but also includes numerous descriptions of past personalities and events derived from the author's own historical research, and images from her collection of island photographs. Between Sunrise and Sunset also occupies a prominent place in the recent history of the island—it filled a void created by the official NPS interpretive strategy, which granted only minimal acknowledgment of the island's human history. The popularity of Rusco's book demonstrates that island visitors are eager to learn more about the history of the cultural landscapes that they encounter on North Manitou Island.

The "History Data Report" prepared by David L. Fritz represents the National Park Service's initial attempt to understand and evaluate the human history of North Manitou Island. The "History Data Report" does not give an integrated narrative account of human activities on the island. Instead, the report is organized as a series of topical vignettes derived from various sources. Appendices include a list of first land purchasers, an historical base map, and an inventory of the island's structures. Unfortunately, the report was completed after the development of the national lakeshore's General Management Plan, and seems to have inspired little serious consideration among NPS planners during the development of the North Manitou Island Development Concept Plan/Interpretive Prospectus. Nonetheless, Fritz's report is a well-documented and useful resource.

Other secondary sources included a 1992 memoir by Glenn C. Furst, and a hiking and backpacking guide written by Robert H. Ruchhoft. Written from a child's perspective, Furst's book is a engaging collection of stories about the author's childhood while living with his family at the lighthouse keeper's station at North Manitou Island. Ruchhoft's guidebook, which encompasses all of the major eastern Lake Michigan islands, contains a brief history of the island and several historic photographs, many of which were obtained from private individuals.

Appendix B

Some Possible American Indian Uses of Plant Species Currently Present on North Manitou Island¹

1 The following discussion and accompanying list of plant species were derived from Hazlett and Vande Kopple's 1983 survey of North Manitou vegetation and Yarnell's study of vegetation use by American Indian groups in the upper Great Lakes. Yarnell's study relies heavily on historic-period or modern ethnographic accounts that offer only broad generalizations or apply only to specific cultural groups. For this reason, and because certain species that formerly occurred on the island may now be missing from its flora, Appendix B should be regarded only as a preliminary outline of possibilities. See Brian T. Hazlett and Robert J. Vande Kopple, The Terrestrial Vegetation and Flora of North and South Manitou Islands, Sleeping Bear Dunes National Lakeshore, Leelanau County, Michigan (Douglas Lake, Mich.: University of Michigan Biological Station, 1983); Richard Asa Yarnell, "Aboriginal Relationships between Culture and Plant Life in the Upper Great Lakes Region," Anthropological Papers No. 23 (Ann Arbor: Museum of Anthropology, University of Michigan, 1964).

 Yarnell, "Aboriginal Relationships between Culture and Plant Life," 143.
 Ibid., 98. In an important ethnobotanical study, Richard Asa Yarnell identified nearly 400 native plant species that were utilized by the American Indian inhabitants of the upper Great Lakes. These represent approximately 20 per cent of the total number of different species that are native to the region.² The cumulative effects of centuries of human-plant interactions may be far-reaching. Ethnobotanists have observed that "subspecific taxa" are two to three times more common among plant genuses that possessed economic value, than among those that do not. Among the plants that were utilized by American Indians, genetic variation is about twice as great as the variation among the total flora of the upper Great Lakes.³ In the case of intensively cultivated plants, such as corn, squash, beans, sunflower, tobacco, and gourd, humans played a more powerful and more obvious role in genetic manipulation.

With the exception of agricultural cultigens, the extent to which human interactions are responsible for genetic divergence remains unclear. What is more certain, is that aboriginal peoples altered the environments that they inhabited by extending the range of certain plants, and by intentionally and unintentionally altering ecosystems to favor plants and animals that were beneficial to humans. Although agriculture is the most obvious example of environmental manipulation, the landscape was altered in more subtle ways, too. Activities such as collection of food and firewood, disposal of waste, and burning altered local soil conditions, increased light, and modified humidity. The "natural" composition of plant and animal communities in certain localities shifted in response to human interventions. Indeed, in the upper Great Lakes region, such disturbances

may have been beneficial to humans. Many valuable products (e.g. maple sap, edible nut- and fruit-bearing trees) are relatively less abundant in climax forest vegetation, and many economically valuable species are less productive in dense stands. Berry bushes, for example, produce most abundant in sunny clearings. Thus, as openings, abandoned agricultural fields may have remained "productive" and economically valuable long after cultivation had ceased. In terms of both genetic and environmental characteristics, prehistoric humans may have influenced the flora of the region to an unexpected degree.

It is difficult to extrapolate current ethnobotanical knowledge to a relatively small environment like North Manitou Island without engaging in a considerable degree of speculation. Accordingly, the information presented in this appendix merely constitutes an outline of possibilities. Although the following list identifies more than 150 North Manitou plant species that may have possessed utilitarian or cultural value for prehistoric, aboriginal people, all of the most economically useful plants (e.g. sugar maple, paper birch, blueberry, etc.) are available and more abundant on the mainland. Furthermore, the modern vegetation of the mainland includes several useful plant species that presently are absent from both north and south Manitou islands. Prehistoric peoples may have exerted a greater impact on the ecosystems of the mainland, where they probably engaged in more intensive hunting and plant collecting.

Nonetheless, prehistoric occupation may have impacted North Manitou's native plant communities, even if the island's flora was not extensively exploited. The most likely influence is the possible introduction and/or dispersal of native weedy species. Such species thrive in disturbed habitats. According to Yarnell, likely candidates for dispersal by humans include spreading dogbane (Apocynum androsaemifolium), a mint (Mentha arvensis), bedstraw (Galium spp.), a chenopod (Chenopodium album), butterfly weed (Asclepias tuberosa), and common milkweed (Asclepias syriaca). These species also possess potential economic value, and all are represented in the island's current flora. 5 All of these species produce small, winddispersed seeds that could have reached the island without assistance from humans. However, given the absence of significant numbers of burrowing or large, grazing mammals on the island, humans may have been the primary agents for creating the small patches of disturbed ground necessary for these species. All would have thrived in the abandoned camp sites left behind by prehistoric hunting and fishing parties.

⁴ Ibid., 146.

⁵ Ibid., 93.

Plant Species		Pa	art I	Utili	ized	<u> </u>						Us							Se	asc	n						
Common Name	Latin Name	sap	bark	cambium	wood/fiber	stems/branches	flowers	roots/fubers/bulbs	fruits/berries	seeds/nuts	leaves (greens)	Food	Beverage	Medicine	Ceremonial	Smoking	Dye	Utility/Technology		ring		Late Spring	Summer	Late Summer	Fali	Late Fall	Winter
			,a	ొ	3	5	E	2	<u>.</u>	š	2	<u> </u>	m		Ü	Ñ	Q.	5	₹	ŭ	Š		ű	<u>"</u>	E.	3	3
Balsam fir	Abies balsamea	!	.				-			ļ	 	1	ļ	1	ļ		<u> </u>	1]		
Red maple	Acer rubrum	-		1			ļ		ļ	 	.	١.,	<u> </u>	1	ļ	ļ	ļļ										
Sugar maple	Acer saccharum	- 1	ļ		/				1	-	<u> </u>	1			ļ		ļ	1		1	<u></u>						
Mountain maple	Acer spicatum	1)	1			ļ		1			<u>-</u>		1	ļ	<u> </u>	<u> </u>										
White baneberry, white cohosh	Actaea pachypoda	 			ļ	L	1		ļ		<u>. </u>	1		1	_											22	
Red baneberry, snakeberry	Actea rubra	ļ.,				1	.	1		L.	.	<u> </u>		1													
Maidenhair fern	Adiantum pedatum	1				ļ	1	1	1	1	4		 		1										(
Cocklebur	Agrimonia gryosepala	-		<u> </u>		<u> </u>		ļ.,					ļ	1	ļ					8. <u></u>							
Wild onion	Allium cernuum		<u> </u>		ļ			1	<u> </u>		1	1	-							•						1	
Wild teek, ramp	Allium tricoccum	1	1			L.		1	.	1	1	1	L	1	<u>L</u> .					1						•	
Juneberry	Amelanchier laevis						ļ	<u> </u>	4	-		 						1						1			**
Juneberry	Amelanchier sanguinea			ļ.,	.	<u>.</u>	J		1	<u> </u>	L.,	ļ											4				Ž.
Pearly everlasting	Anaphalis margaritacea		<u> </u>		L		1							1	<u>L_</u>	1											
Canada anemone	Anemone canadensis						ļ <u>.</u>	/				1		1]									
Thimbleweed	Anemone cylindrica							1				1	<u> </u>	1													
Spreading dogbane	Apocynum androsaemifolium				1			/						1	1			1									
Wild columbine	Aquilegia canadensis							/			ļ.,	1		1													
Wild sarsaparillia	Aralia nudicaulis							1	1			<u></u>		1	1												
Spikenard	Aralia racemosa							1			1	1		1							7						
Bearberry	Arctostaphylos uva-ursi								/		/	1		1	1	1				1			1	1	1	1	7
Indian turnip, jack-in-the-pulpit	Arisaema triphyllum							1													1					1	
Common milkweed	Asclepias syriaca				1							1			1			1									
Butterfly weed	Asclepias tuberosa		. 68								1			1				1				1	1				
Large-leaved aster	Aster macrophyllus							1				1		1		1											
Lady fern	Athyrium filix-femina						X .	1							1												
Yellow birch	Betula lutea	1			/							1						1								M	
Paper birch	Betula papyrifera		1														1	1								M	
Marsh marigold, cowslip	Caltha palustris							1			/											1					
Blue bell, hare bell	Campanula rotundifolia				1			1						1												#	
Plantain-leaved sedge	Carex plantaginea														1												
New Jersey tea	Ceanothus americanus													1													
Climbing bittersweet	Celastrus scandens					1						1		1													7
Leather leaf, cassandra	Chamaedaphne calyculata										1		1	1		-					1	1	1	1	1		
Goosefoot, pigweed, lambsquarters	Chenopodium album									1		1												∭	1	1	1
Strawberry blight; Indian paint	Chenopodium capitatum													1	1									₩ 1			

Plant Species		Pa	rt U	tiliz	zed		-					Us	<u> —</u> .														7
Common Name	Latin Name	des	bark	cambium	wood/fiber	stems/branches	flowers	roots/tubers/buibs	fruits/berries	seeds/nuts	leaves (greens)	Food			Ceremonial	Smoking	Dye	Utility/Technology	Anytime	Early Spring	Spring	Late Spring	Summer	Late Summer	Fall	Late Fall	Winter
Pipsissewa, wintergreen, waxflower	Chimaphila umbellata				ļ		.	.			<u> </u>			1													
Reindeer moss*	Cladonia rangiferina										1	1															
Spring beauty	Claytonia caroliniana					ļ		1				1				İ					1						
Corn lify, blue-bead lify	Clintonia borealis	- W. C.						1		0.0	L.	l		1													
Gold thread, cankerroot	Coptic groenlandica				L.			1			1.0			1			1		9.39								
Pagoda dogwood, green osier	Cornus alternifolia		/		.							<u> </u>		1	<u> </u>	1											
Bunchberry, dwarf cornel	Cornus canadensis								1		<u> </u>	1		✓										1	1		
Round-leaved dogwood	Cornus rugosa		/													1											
Red osier	Comus stolonifera		1					1						1		1	1	✓									
Beaked hazelnut	Corylus cornuta									1		1]		L		L							1	1		
Hathorne, thornapple	Crataegus chrysocarpa								1			1		1]												
Hawthorn, thornapple	Crataegus spp.					1			1		12 1000	1		1		1		√							1		
Pepperroot, toothwort	Dentaria diphylla							1				-									1						
Pepperrot, toothwort, crowfoot	Dentaria lacinata	9. 560a						1													7						
Bush honeysuckle	Diervilla lonicera													1													
Sheild fern, crested wood fern	Dryopteris cristata							/				}			1		<u>-</u>										
Scouring rush, field horsetail	Equisetum arvense													1	1			*****									
Wood horsetail	Equisetum sylvaticum														1	1											
Philadelphia fleabane	Erigeron philadelphicus						1							1													
Daisy fleabane, whitetop	Erigeron strigosus											1		1													
Boneset, thoroughwort*	Eupatorium perfoliatum											1		1													
Beech	Fagus grandifolia				1		***	· · · ·		1	1	1										7	1	1	7	7	7
White ash	Fraxinus americana				1						1	1	 														
Black ash	Fraxinus nigra				1							1		1			1	1									
Spring cleavers, goosegrass	Galium aparine								1				ł	1			1				1						
Small cleaver	Galium tinctorium												<u>-</u>	1			ii										
Moxie plum, creeping snowberry	Gaultheria hispidula					t			1		1	1	1								1	7	7	1	1	1	
Teaberry, checkerberry, wintergreen	Gaultheria procumbens						1		1		1	1	1	1			†` · · -		1	7					7	7	7
Black huckleberry	Gaylussacia baccata								1						<u> </u>									1			
Rattlesnake plantain	Goodyera repens								1		1	1		1			1										
Rein orchis, bracted green orchis	Habenaria viridis									1''''			1		1		1										
Witch hazel	Hamamelis virginiana					1		†	†	/		_	1	1	1												
Liverleaf	Hepatica acutiloba					۳		1		ľ		-		-	-		1										
Liverleaf	Hepatica americana			300			!		l	H	 	-		1	1		1								***		
Cow parsnip, masterwort	Heracleum maximum						-	1	1	7	1	1		1	7		 						1989				

Plant Species		Pa	rt l	Jtil	ize	d							Us	e	_												-	
Common Name	Latin Name	gap	bark	cambium	wood/fiber	stemsthranchine	flowers	lowers	roots/tubers/bulbs	fruits/berries	seeds/nuts	leaves (greens)	Food	Beverage	Medicine	Ceremonial	Smoking	Dye	Utility/Technology	Anytime	Early Spring	Spring	Late Spring	Summer	ate Summer	Fall	Late Fall	Winter
Winterberry, black alder	llex verticillata	- 55	-	٥			, ,				. 0		<u> </u>	Ш_	1	O	(I)	Ω.	_		ш.	g)	-	S		LET.		
Pale jewelweed	Impatiens pallida	+		1		1		7				1		-	1			1	- -				-	-				
Blue flag, poison flag	Iris versicolor				1	+		***				1			1	1		-	1									
Soft rush	Juncus effusus	-		1		١.	/			****			-		-	•			7	-	****	 		-				-
Common juniper	Juniperus communis	1000				₩.	-			7		-		-	1				Ţ									
Wild lettuce	Lactuca canadensis	1		1		-	1	+		4 6					7			_	_								-F	\blacksquare
Wood nettle	Laportea canadensis			1	1	†	T	***	7						1			-	1									
Eastern larch, tamarack	Larix Iaricina		7		1	+		7						<u></u>	1				1	**					-		- 	
Wood liliy	Lilium philadelphicum					1							1		1				- <u>·</u>								***	
Twin flower	Linnaea borealis	+		-	1-	+	+	1					<u> </u>		1								*****			8 ::		
Puccoon	Lithospermum caroliniense	·				1	1	1							-			1						-	.			44.0
Fly honeysuckle*	Lonicera canadensis	To the				†	7		/						1						****							
Clubmoss	Lycopodium clavatum			***		ď	1								1													
Ground pine	Lycopodium complanatum					7									1											- 1	***	
Ground pine	Lycopodium obscurum	la.						Ť							1						*****			7. 77				
Two-leaved Solomon's seal, scurvy berries	Maianthemum canadese									/					1									1	7	1	1	7
Mint	Mentha arvensis							Ħ				1		1	1							1	1	1	1	1		░
Partridge berry	Mitchella repens				1					7		1	1		1		1											
Mountain holly, catherry	Nemopanthus mucronata									/			1												1	1		
Sensițive fern	Onoclea sensibilis					T									1		_		_									
Sweet jarvil, wooly sweet cicely	Osmorrhiza claytoni																											
American hop-hornbeam	Ostrya virginiana		/		1				· · ·]						1				✓									
Woodbine, Virginia creeper	Parthenocissus quinquefolia			1									1															
Common lousewort, wood betony	Pedicularis canadensis												1		1	1												
White spruce	Picea glauca														1													
Black spruce	Picea mariana	1							1						1				1									
Red pine	Pinus resinosa	/							/						1				1									
White pine	Pinus strobus	1		1				1				/	1		1				1			1						
Pale plantain	Plantago rugelii											J			1													
Solomon's-seal	Polygonatum pubescens			ि					/																			
Solomon's seal	Polygonatum spp. (3)	100							/				1		1	1										1		
Large-toothed aspen	Populus grandidentata			1					/													1						
Quaking aspen	Populus tremuloides		1												1									1				
Marsh cinquefoil	Potentilia palustris														1													
Sand cherry	Prunus pumila				1			T.		1										13%				1			a F	

Plant Species		Pa	rt L	Itili	zed							Us	e					\neg	•			_					—
<u> </u>		- 1000		1 30	1		1000	w	1333		J.	1	- -	1	· I	- 1		_	ा	******	8000			[Z 15]			
Common Name	Latin Name	sap	bark	cambium	wood/fiber	stems/branches	flowers	roots/tubers/bulbs	fruits/berries	seeds/nats	leaves (greens)	Food	Beverage	Medicine	Ceremonial	Smoking	Dye	Utility/Technology	Anytime	Early Spring	Spring	Late Spring	Summer	Late Summer	Fall	Late Fail	Winter
Black cherry, rum cherry	Prunus serotina			ļ					1			1		1										1			
Chokecherry	Prunus virginiana								1		1	1		1]_						1				
Bracken fern	Pteridium aquilinum		1	.		***	ļ	1			1										1						
Bracken fern	Pteridium quilinum	1000		<u>.</u>				1		1					1	[.		į.									
Wintergreen, shinleaf	Pyrola elliptica									.																	
Red oak	Quercus rubra		ļ							/		1	<u> </u>	✓			√	9							1		
Staghorn sumac	Rhus typhina		.	·				1	1		1	1	1	1	·	1	1						V	1	1	1	
Prickly gooseberry, dogberry	Ribes cynosbati			<u> </u>					_	1.33		1	L	1				Ű						✓			
Currant	Ribes hudsonianum				<u> </u>			<u> </u>	/		1	1	 										✓				
Smooth rose	Rosa blanda		L					1						✓													
Highbush blackberry	Rubus allegheniensis	- 1333	<u> </u>					<u> </u>	1					1									1				
Smooth blackberry	Rubus canadensis		ļ						1		200	1	<u> </u>											1			
Black raspberry	Rubus occidentaliis						<u> </u>		1			1											1				
Thimbleberry	Rubus parviflorus	🕮							1	<u></u>		1											1				
	Rubus pennsylvanicus	10000		ļ	<u> </u>			<u> </u>	/			1	L	<u></u>													<u> </u>
Dwarf raspberry	Rubus pubescens	1,000			!					ļ		1	L										1				
Raspberry	Rubus strigosus		<u> </u>			•		.	1			1		1													
Blackeyed Susan, cone flower	Rudbeckia hirta													1			1										
Shining willow	Salix lucida		1		 		 	<u> </u>					L	1		1											
Common elder*	Sambucus canadensis								/			1		1				[]							1		
Red-berried elder	Sambucus pubens		1		ļ		ļ	ļ		Ĺ		1			J]									
Pitcher plant	Sarracenia purpurea							1	.			<u> </u>	_	1	ļļ	ļ											
Wool grass	Scirpus cyperinus				<u></u>	/						ļ			L			1					200				
Great bulrush, soft-stem bulrush	Scirpus validus	8000				1	1200 A					<u> </u>	L_					1			00000						
Great bulrush	Scirpus validus		L			/		/				1								1		1					
(False Solomon's-seal	Smilacina racemosa				ļ			1				<u> </u>		1	<u> </u>	Ì.											
Goldenrod	Solidago canadensis						/				1	<u> </u>		1	ļ <u>.</u>										ļ		
Goldenrod	Solidago flexicaulis						<u>. </u>						ļ ļ	1													
Goldenrod	Solidago gigantea						1	ļ	ļ	ļ	 	ļ		1				_]							
Fragrant goldenrod*	Solidago graminifolia						1					Ì		1									(2000) (2000)				
Woundwort	Stachys palustris											ļ		1								757 702					
Snowberry	Symphoricarpus albus		ث يا					1	ļ <u>.</u> .			-		1				_			<u></u>						
Skunk cabbage*	Symplocarpus foetidus		8000]		1	1				✓							<u> </u>				<u> </u>			•	
American yew	Taxus canadensis										1			1				[1								
Arborvitae, northern white cedar	Thuja occidentalis	la sa	/	•				/			.	1	1	1	1		1	1			193						hail

Plant Species		Pa	rt l	Itili	zed							Us	е												_		\neg
Common Name	Latin Name	Sap	bark	cambium	wood/fiber	stems/branches	flowers	roots/tubers/bulbs	fruits/berries	seeds/nuts	leaves (greens)	Food	Beverage	Medicine	Ceremonial	Smoking	Dye	Utility/Technology	Anytime	Early Spring	Spring	Late Spring	Suramer	Late Summer	Fall	Late Fall	Winter
Basswood	Tilia americana	1			1	1						1						1			1						
Starflower	Trientalis borealis							1				-		T		}	-										
Trillium	Trillium grandiflorum										1			1	Ī		1										
Hemlock	Tsuga canadensis		/								1		1	1			1	1	1								
Common cattail	Typha latifolia								T		1		 			1		1					1				
American elm	Ulmus americana		/											1				1									
Low sweet blueberry, sweet hurts	Vaccinium augustifolium								1			1		1		1	1	ļ					1		\square		
Large cranberry	Vaccinium macrocarpon			T					1			1											1		1	1	7
Sour-top blueberry, Canada blueberry	Vaccinium myrtilloides							1	1			1		1	1		·	ļ					1				
Small cranberry	Vaccinium oxycoccos								1			1		1	ļ		1	T						1	1	1	7
Blueberry	Vaccinium spp.								1			1			T	1							1				
Dockmackie, arrowwood	Viburnum acerifolium													1	T	1		-									
Highbush cranberry*	Viburnum opulus								1			1	1	1										1	1	1	7
American dog violet	Viola conspersa													1	T	1											
Downy yellow violet	Viola pubescens							1						1				-		T							
Frost grape, riverbank grape	Vitis riparia	1				1			1			1		1	T				1					1	7		
										1					1]	·										
				Γ		I .		I	1	1			1	-		T	1	1				1		1	I W		

Appendix C

Culturally Significant Non-native Plant Species on North Manitou Island

TABLE C-1

Culturally Significant Non-native Plant Species on North Manitou Island

1996

Common Name	Latin Name	Cultural Use	Location
Norway maple	Acer platanoides	0	North Manitou Village, Cottage Row
Welsh onion	Allium fistulosum L.	G	Garden patch near North Manitou Village
Chives	Allium schoenoprasum L.	G	Lawn near Hans Halseth House
Garden asparagus	Asparagus officionalis L.	G	Adam and Mary Maleski farm, and elsewhere
American chestnut	Castenata dentata	G	South of Beuham orchard
Spotted knapweed	Centauria maculosa	W	Old fields
Flowering quince	Chaenomeles lagenaria	0	North Manitou Village
Common chicory	Cichorium intybus L.	W	Airstrip, roadsides, North Manitou Village
Lily-of-the-valley	Convallaria majalis	О	North Manitou Village, Alstrom homestead
Queen Anne's lace; wild carrot	Dancus carota L.	W	Old fields
Garden pink	Dianthus plumarius L.	O	North Manitou Village
Pin clover	Erodium cicutarium	W	North Manitou Village
Orange day-lily	Hemerocallis fulva	O	North Manitou Village
Butternut	Inglans cinerea L.	G	Manitou Island Association farm and orchard, North Manitou Village
Mullein pink	Lychnis coronaria L.	Ο	John Maleski place
Alfalfa	Medicago sativa L.	Α	John Maleski homestead and elsewhere
White sweet clover	Melilotus alba	Α	Fields and roadsides
Grape hyacinth	Muscari atlanticum	О	North Manitou Village
Oriental poppy	Papaver orientale L.	O	Coast Guard Station, North Manitou Village
Garden syringa	Philadelphus coronarius L.	O	Adam and Mary Maleski farm
Moss-pink	Phlox subulata L.	О	North Manitou Cemetery, Adam and Mary Maleski farm
Kentucky bluegrass	Poa pratensis (?)	O	North Manitou Village, John Maleski place, Nerland/Anderson house
Lombardy Poplar	Populus nigra L. var. italica	O	Coast Guard Station, North Manitou Village
Apricot	Prunus armeniaca L.	G	Cottage Row, below beach ridge
Sweet cherry	Prunus avium	Α	Manitou Island Association orchard, North Manitou Village
Plum	Prunus domestica	G	Frederickson place
Pcar	Pyrus communis	G	North Manitou Village and elsewhere
Apple	Pyrus malus L.	Α	Beuham orchard, North Manitou Village and elsewhere
Black locust	Robinia pseudoacacia L.	O	North Manitou Village, MIA north orchards
Cabbage Rose	Rosa centrifolia	О	Adam and Mary Maleski farm, Cottage Row
Sour dock	Rumex crispus	W	Old fields

A = agricultural

G = domestic garden/orchard

O = ornamental

W = weed

Culturally Significant Non-native Plant Species on North manitou Island (continued)

Common Name	Latin Name	Cultural Use	Location
Scdum	Sedum spectabile (?)	0	Adam and Mary Maleski farm
Bladder campion	Silene vulgaris	W	Old fields, roadsides
Billiard spirea	Spiraea X (Billiardi)	O	Adam and Mary Maleski farm; Newhall cottage
Spirca	Spiraea trichocarpa	O	North Manitou Village
Bridal wreath spirca	Spiraea X (Vanhouttei)	O	Cottage Row
Lilac	Syringa vulgaris	О	North Manitou Village, Adam and Mary Maleski farm and elsewhere
Common dandelion	Taraxacum offinale	W	North Manitou Village, roadsides
Goat's beard	Tragopogon dubius	W	Old fields, roadsides
Hop clover	Trifolium aureum	Λ	John Maleski homestead
Hairy Vetch	Vicia sativa	Λ	Large patches in fields
Common periwinkle	Vinca minor	O	Cottage Row

Tending	a	Comfortable	Wilderness
---------	---	-------------	------------

Appendix D
Federal Census of Population North Manitou Island, 1860-1920

Table D-1
Federal Census of Population
North Manitou Island
1860¹

Name	Age	Sex	Place of Birth	Occupation	Value of Real Estate	Value of Personal Estate
Gerkin, John	36	M	Hanover	Day Laborer		250
Gerkin, Margret	36	F	Hanover			
Gerkin, Dedrick	10	M	Michigan			
Gerkin, Catharin	8	F	Michigan			
Gerkin, Ellen	6	F	Michigan			
Wickern, John	33	M	Hanover	Shoe Maker		180
Wickern, Dorey	23	} ⊦	Hysen? [Hessian?]			
Wickern, Catharin	4	F	New York			
Wickern, Margret	1	F	Michigan			
Botohaen, Carson	26	M	Hanover	Farmer		170
Botohaen, Mary	30	F	Michigan			
Botohaen, Carson	3	M	Michigan			
Botohaen, John	1	M	Michigan			
Fluker, Fredland	41	M	Prussian			100
Fluker, Catharin	40	F	Prussian			
Fluker, Franny	16	P	Prussian			
Fluker, Catharin	13	F	Prussian			
Fluker, Andrew	20	M	Prussian	Day Laborer		
Fluker, Mary	30	F	Prussian	Domestic		
Matland, John	32	M	New York	Farmer & Fisherman	160	100
Matland, Lauten Λnn	18	F	Michigan			
Matland, Emily	1	F	Michigan			
Hemfrot, Fredrick	30	M	Prasine?	Day Laborer		150
Hemfrot, Elisabath	24	F	Bjrun Elm??			
Hemfrot, William	4	M	Michigan			
Hemfrot, Elisabath	2	F	Prussian			
McCarthy, Henry	28	M	Massachusetts	Day Laborer		200
McCarthy, Mary Ann	29	F	England	-		
McCarthy, Josef	12	M	New York			
McCarthy, Charles	4	M	New York			

¹ Individual names are grouped according to household, and listed in the order that they appear on the manuscript schedules.

Name	Age	Sex	Place of Birth	Occupation	Value of Real Estate	Value of Personal Estate
Only, John	31	M	New York	Day Laborer		130
Only, Cellia	27	F	Canada			
Only, John A.	6	M	New York			
Only, William	5	M	New York			
Only, Poley A.	3	F	Michigan			
Only, Mileden A.	10 months	M	Michigan			
Only, Wilard	10 months	M	Michigan			
Gustuf, Peter	30	M	Sweden	Day Laborer		
Gustuf, Amoiu?	34	¥	Sweden	·		190
Gustuf, John	34	M	Sweden			
Gustuf, Charles A.	24	M	Sweden	Day Laborer		
Anderson, John	29	M	Sweden	•		
Crofs, Frederick	46	M	Prusian	Farmer		150
Crofs, Catharin	47	F	Prusian			
Crofs, Mary	11	H	Prusian			
Crofs, Elisabath	11	\mathbf{F}	Prusian			
Crofs, Phillip	9	M	Prusian			
Crofs, Peter	6 months	M	Prusian			
Crofs, Caroline	9 months	F	Michigan			
Pflugen, Ferdinand	1,2	М	Netenburg Sea	Fisherman		200
Pflugen, Barbrel?	51	F	Byrnden			
Pflugen, Andrew	18	M	Netenburg Germany			
Pflugen, Frances	16	F	Netenburg Germany			
Pflugen, Catharin	12	F	New York			
Pflugen, Charles August	21	M	Berden	Day Laborer		
Stormer, Henry	29	М	Germany	Day Laborer		100
Stormer, Catharin	24	F	Germany	-7		
Stormer, Greta	7	F	Germany			
Stormer, Peter	5	M	Michigan			
Heif?, Podia?	49	М	Norway	Day Laborer		175
Heif, Catharin	48	F	Norvay	,		-
Heif, Henry	20	M	Norway			
Heif, Giato	16	F	Norway			
Dalton, John	34	M	New York	Farmer		100
Dalton, Manda	24	F	Vermont			
Dalton, John A.	5	M	Wisconsin			
Dalton Manda	5	F	Michigan			
Dalton, Ellen A.	1	ł.	Michigan			
	•					

Name	Age	Sex	Place of Birth	Occupation	Value of Real Estate	Value of Personal Estate
Miller, Carson	38	M	Hanover	Day Laborer		275
Miller, Catharin	34	F	Hanover			
Miller, Anna	13	ħ	Hanover			
Miller, Catharin	5	F	Michigan			
Miller, Mata	3	F	Michigan			
Miller, Margret	2	ls.	Michigan			
Haynes, Fredrick	35	M	Baden	Day Laborer		150
Haynes, Anna	30	F.	Baden			
Haynes, Rosilla	3	F	Michigan			
Helmer, Christian	50	M	Sweden	Day Laborer		75
Helmer, Jacob	19	M	Sweden			
Helmer, Andrew	18	M	Sweden			
Helmer, Rosilla	16	F	Sweden			
Helmer, George	10	M	Sweden			
Helmer, John	9	M	Sweden			
Helmer, Anna M.	5	F	New York			
Gulluck?, John	29	M	Germany	Day Laborer		150
Gulluck, Sophia	24	F	Germany			
Flunayn, Thomas	45	M	New York	Day Laborer		250
Flunayn, Manerna	45	F	Vermont			
Flunayn, Charles	14	M	New York			
Flunayn, Daniel	12	M	New York			
Flunayn, Clarisa	10	F	New York			
Flunayn, Mary	7	F	New York			
Flunayn, William	6	M	New York			
Flunayn, Sophia	4	F	Illinois			
Flunayn, Helien	1	F	Illinois			
Half, Martin	35	M	Hanover	Day Laborer		1650
Half, Hannah	30	F	Hanover			
Half, John	6	M	Wisconsin			
Half, Henry	4	M	Wisconsin			
Half, Martin	1	M	Wisconsin			
Burnes, Nickelson	34	M	Hanover	Day Laborer		125
Burnes, Margret	33	F	Hanover			
Burnes, Peter	3	M	Michigan			
Burnes, Mate?	3	F	Michigan			
Burnes, Henry	2	M	Michigan			

Name	Age	Sex	Place of Birth	Occupation	Value of Real Estate	Value of Personal Estate
Meyers, William	40	M	Hamburg	Day Laborer		100
Meyers, Sophia	40	F	Hamburg			
Half, Cort?	24	M	Hamburg			
Trumel, Bobos?	45	M	Hamburg	Farmer		
Lewany?, Hans	41	M	Norway	Wagonmaker		200
Lewany, Mary	35	F	Norway			
Lewany, Sophia	12	F	Norway			
Lewany, Anna	9	F	Norway			
Lewany, Martha	8	F	Norway			
Lewany, Harnie??	5	M	Wisconsin			
Lewany, Carey	3	ħ	Wisconsin			
Lewany, Charles	8 months	M	Michigan			
Johnson, Arna	28	M	Norway	Day Laborer		100
Johnson, H?	29	F	Norway			
Johnson, John	5	M	Canada			
Johnson, Charles	3	M	Wisconsin			
Johnson, Anna	7?	F	Michigan			
Johnson, Andrew	22	M	Norway	Day Laborer		
Shomaker, Jacob	30	M	Hanover	Fisherman		200
Shomaker, Anna	30	F	Hanover			
Hanson, Frank	40	M	Hanover	Fisherman		500
Stebones, Henry	20	M	Hanover	Day Laborer		
Bash, Nickelos	30	M	Hanover	Day Laborer		80
Bash, Catherine	28	F	Hanover			
Bash, Nickelos	1	M	Michigan			
Warren, John	44	M	Hanover	Carpenter		200
Warren, Anna	40	F	Hanover			
Warren, Henry	12	M	Hanover			
Warren, John	10	M	Hanover			
Warren, Martin	8	M	Hanover			
Droy, Peter	25	M	France	Blacksmith		150
Droy, Francis	33	F	France			
Droy, Peter	11	M	France			
Droy, Daren	5	M	New York			
Droy, Mary	3	F	Michigan			
Droy, Phillip	1	M	Michigan			

Name	Age	Sex	Place of Birth	Occupation	Value of Real Estate	Value of Personal Estate
Droy Margret	44	F	France	}}		150
Droy, Catherine	18	F	France			
Droy, Louisa	14	F	France			
Droy, Lisa	12	F	France			
Droy, Emily	9	F	France			
Charney, George	48	M	France	Day Laborer		
Ackly, Frank?	39	M	Switzerland	Day Laborer		160
Ackly, Catherine	34	F	Werdenburg?			
Scheer, Randolph	22	M	Switzerland	Day Laborer		100
Scheer, Elisabath	15	F	Switzerland			
Scheer, Batish	46	M	Balary	Day Laborer		
Gray?, John	42	M	Hanover	Day Laborer		200
Gray, Anna	32	F	Michigan	•		
Gray, Richard	12	M	Michigan			
Gray, Catherine	10	F	Michigan			
Gray, Emily	8	F	Michigan			
McCarta?, Daniel	55	M.	Leeland	Fisherman		200
McCarta, Margret	44	F	Leeland			
McCarta, Mariah	14	F	Michigan			
McCarta, Jerry	12	M	Michigan			
McCarta, Elisa	10	F	Michigan			
McCarta, Margret	6	F	Michigan			
McCarta, Elisa	4	F	Michigan			
McCarta, Dennis	1	M	Michigan			
Wany?, Hans	40	M	Norway	Carriage Maker		300
Wany, Ana	30	F	Norway			
Wany, Sophia	10	F	Michigan			
Wany, Anna	8	F	Michigan			
Wany, Mary	6	F	Michigan			
Wany, I-Ians	4	M	Michigan			
Wany, Charles	3	M	Michigan			
Wany, Caroline	3 months	F	Michigan			
Cristpher, Arney	30	M	Norway	Farmer		100
Cristpher, Oceny	25	F	Norway	2 504,23504		200
Cristpher, John	5	M	Nonvay			
Cristpher, Charles	2	M	Wisconsin			
	1	F	Michigan			
Cristpher, Anna		1.	wacingari			

Name	Age	Sex	Place of Birth	Occupation	Value of Real Estate	Value of Personal Estate
Dolton, Henry	33	M	New York	Day Laborer		150
Dolton, Amanda	24	F	Vermont	•		.50
Dolton, John Henry	5	M	Wisconsin			
Dolton, Mary	3	F	Michigan			
Dolton, Sophia	1	F	Michigan			
Dolton, Emmy	2 months	F	Michigan			
Clyne?, Joseph	40	M	Norway	Day Laborer		175
Clyne, Mary	55	ł.	Norway	•		
Clyne, Mary	10	F	Norway			
Clyne, John	7	M	Illinois			
Clyne, Charles	5	M	Michigan			
Clyne, Joseph	3	M	Michigan			
Charvey, George	S5	M	France	Day Laborer		90
Cargeseon?, Chetle?	37	M	Norway			160
Cargeseon?, Camilia	37	F	Norway			
Cargeseon?, Cleeda	11	¥	Michigan			
Cargeseon?, Carmelia	4	F	Michigan			
Cargeseon?, Betsy	1	F	Michigan			
Wilis, Eleene	27	M	New York	Day Laborer		
Lompry, Francis	35	M	Canada East	Blacksmith		150
Lompry, Ruth	27	H	New York			
Lompry, Jerry E	7	M	New York			
Lompry, Ellen	5	F	New York			
Lompry, Ida	3	F	New York			
Petes, Nina	54	M	Prussia	Fisherman		150
Petes, Margeanna	34	F	France			
Petes, Peter	9	M	New York			
Petes, John	6	M	New York			
Petes, Lucy	4	F	New York			
Petes, Nickelos	3 months	M	Michigan			
Bowen, Stephen	54	M	Bavary [Bavaria?]	Farmer		225
Frank, John	33	M	Bavary	Farm Laborer		
Donkein, Simon	20	M	New York			
Skeiner, Edward	22	M	England			
Tompson, Thomas	22	M	Norway			
Nlwijts?, Horis?	16	M	New York			
Ferry, James	21	M	Michigan			
Dagon, John	20	M	Bavary			

Name	Age	Sex	Place of Birth	Occupation	Value of Real Estate	Value of Personal Estate
Mestland, James	27	M	Canada East	Fisherman		250
Cain, Michel	48	M	Ireland			
McDonald, Michal	45	M	Ireland			100
McDonald, Richard	46	M	Ireland			
Lee, Charles	22	M	Norway	Farmer		50
Sits, George	52	M	Pennsylvania			150
Sits, Betsy	45	F	Pennsylvania			
Sits, George	17	M	New York			
Sits, Emoline	13	F	New York			
Sits, Elisabath	12	F	New York			
Sits, John	10	M	New York			
Sits, Liman	8	M	New York			
Sits, Almina	4	F	New York			
Curts, Christopher	30	М	Denmark	Farmer		200
Curts, Anna	26	F	New York			
Curts, Mary Jane	4	F	New York			
Curts, Elisabath	2	۴	New York			
Menllen, Joseph	31	M	France	Fisherman		150
Menllen, Margret	20	F	France			
Menlien, Joseph	4	M	New York	-	•	
Menllen, Frank	2	M	New York			
Lee, Edward	21	M	Norway	Day Laborer		
Striclan, Charles	49	M	New York	Carpenter		200
Striclan, Betsy	32	F	New York	•		
Striclan, Orlando	12	M	New York			
Striclan, Edwin	8	M	New York			
Striclan, Alonzo	3	M	New York			
Striclan, Alice J.	1	h	New York			
Barett, Charles L.	30	М	New York	Day Laborer		150
Barett, Henry	8	M	Michigan	•		
Barett, Ada	3	F	Michigan			
Winston?, Mary	38	F	New York	Domestic		
Bronton?, Harrison	21	M	New York	Day Laborer		50
Bronton, Margret	25	F	Pennsylvania	•		
Graham, Matilda	10	F	New York			
Graham, Francis	4	¥	New York			
Graham, William I-I.	3	M	New York			
Gianalli, William Fr.	3	144	TOW TOTA			

Name	Age	Sex	Place of Birth	Occupation	Value of Real Estate	Value of Personal Estate
Robertson, Ena	28	M	England	Day Laborer		200
Harnes, Jacob	42	M	Bavary	Day Laborer		75
Thompson, Nelson	25	M	Norway	Day Laborer		50
Johnson, Robert	21	M	Norway	Day Laborer		50
Anderson, Susan	18	H	Norway	Domestic		
Hageson, Nelson	23	M	Norway	Day Laborer		150
Carson, Oley	26	M	Norway	•		100
Olson, Gunder	35	M	Norway			125
Larson, Thomas	22	M	Norway			60
Larson, Aaron	24	М	Norway			100
Johson, Lewis	21	M	Norway			80
Hanson, Fargus	22	M	Norway			70
Nelson, Allen	22	M	Norway			30
Herald, Edward	26	M	Norway			150
Herald, Conate	22	M	Norway			

Table D-2 Federal Census of Population North Manitou Island

1870¹

Name	Age	Sex	Place of Birth	Father Foreign Born?	Mother Foreign Born?	Occupation	Value of Real Estate (\$)	Value of Personal Estate (\$)
Enockun?, Godgen	30	M	Norway	Y	Y	Laborer		
Enockun, Carrie	28	F	Norway	Y	Y	Keeping House		
Enockun, Severt	4	M	Michigan	Y	Y	At Home		
Enockun, Amelia	2	F	Michigan	Y	Y	At Home		
Robinson, Hugh	32	M	Ireland	Y	Y	Butcher	3000	
Seiber, Anthony	21	M	Prussia	Y	Y	Carpenter		
Johnson, Hans	52	М	Norway	Y	Y	Laborer		
Johnson, Hannah	33	F	Norway	Y	Y	Keeping House		
Johnson, Hans	17	M	Norway	Y	Y	At Home		
Johnson, Lewis	16	M	Norway	Y	Y	At Home		
Johnson, Gerhard	12	M	Norway	Y	Y	At Home		
Johnson, Hans	2	M	Norway	Y	Y	At Home		
Johnson, Gamena	6	F	Norway	Y	Y	At I-lome		
Johnson, Larson,	4	F	Norway	Y	Y	At Home		
Smith, John	55	M	Bavaria	Y	Y	Laborer		
Smith, Catherine	43	F	Baden	Y	Y	Keeping House		
Smith, Margaret	20	F	Canada	Y	Y	At Home		
Smith, Catharine	14	F	Canada	Y	Y	At Home		
Smith, Henry	12	M	Canada	Y	Y	At Home		
Smith, Margaret	20	F	Canada	Y	Y	At Home		
Smith, Catharine	14	F	Canada	Y	Y	At Home		
Smith, Henry	12	M	Canada	Y	Y	At Home		
Smith, Adam	8	M	Canada	Y	Y	At Home		
Smith, John	5	M	Canada	Y	Y	At Home		
Smith, Sophina	3	F	Canada	Y	Y	At Home		
Oleson, Peter	37	M	Norway	Y	Y	Laborer		
Oleson, Annie	25	H	Norway	Y	Y	Keeping House		
Christ, Andrew	24	M	Sweden	Y	Y	Laborer		
Christ, Lucy	30	F	Sweden	Y	Y	Keeping House		
Anderson, Andrew	47	M	Norway	Y	Υ	Fisherman		
Frederickson, Henry	29	M	Denmark	Y	Y	Fisherman		
Paetsthow, Fritz	25	M	Denmark	Y	Y	Fisherman		

¹Individual names are grouped according to household, and listed in the order that they appear on the manuscript schedules.

Name	Age	Sex	Place of Birth	Father Foreign Born?	Mother Foreign Born?	Occupation	Value of Real Estate (\$)	Value of Personal Estate (\$)
Oleson, Lewis	55	M	Norway	Y	Y	Laborer		
Oleson, Margaret	52	F	Norway	Y	Y	Keeping House		
Linn, Andrew	25	M	Sweden	Y	Y	Laborer		
Luneburg, Jacob	33	M	Sweden	Y	Y	Laborer		
Luneburg, Hannah	30	F	Sweden	Y	Y	Keeping House		
Luneburg, Andrew	10	M	Michigan	Y	Y	At Home		
Luneburg, Ian	1	F	Michigan	Y	Y	At Home		
Swan, Peter	54	M	Sweden	Y	Y	Laborer		
Swan, Sarah	50	F	Sweden	Y	Y	Keeping House		
Swan, James	25	M	Sweden	Y	Y	Laborer		
Swan, Lucy	16	F	Sweden	Y	Y	At Home		
Pickard, Nicholas	53	M	New York	N	N	Wood Merchant		
Pickard, Nancy	50	F	New York	N	N	Keeping House		
Pickard, Jessie	13	F	New York	N	N	At Home		
Pickard, Burnside	8	M	New York	N	N	At Home		
Chrisman, Jacob	58	M	New York	N	N	Clerk at wood dock		
Norris, Donna	76	M	Canada	Y	Y	Fisherman		
Thompson, Nelson	29	M	Norway	Y	Y	Clerk in store		
Thompson, Peter	40	M	Norway	Y	Y	Laborer		
Larson, Ole	55	M	Norway	Y	Y	Carpenter		
Larson, Mary	50	Ŀ	Norway	Y	Y	Keeping House		
Birch, John	49	M	Poland	Y	Y	Laborer		
Birch, Nancy	47	F	Poland	Y	Y	Keeping House		
Chickey, Rudolph	35	M	Poland	Y	Y	Laborer		
Chickey, John	32	M	Poland	Y	Y	Laborer		
Crandall, William	37	M	New York	N	N	Coal Dealer	4000	1000
Crandall, Sarah	22	F	New York	N	N	Keeping House		
Buss, Leander	22	M	New York	N	N	Keeping Boarding House	110	
Buss, Anna	20	F	New York	N	N	Keeping House		
Callkelfine, Charlie	25	M	Sweden	Y	N	Laborer		
Erickson, Alfred	40	M	Sweden	Y	N	Laborer		

Name	Age	Sex	Place of Birth	Father Foreign Born?	Mother Foreign Born?	Occupation	Value of Real Estate (\$)	Value of Personal Estate (\$)
Creager, Mathias	35	М	Poland	Y	N	Laborer		
Creager, Jane	33	F	Poland	Y	Y	Keeping House		
Creager, John	10	M	Poland	Y	Y	At I-lome		
Creager, Jane	8	Ą	Poland	Y	Y	At I-lome		
Creager, Matthias	6	M	Michigan	Y	Y	At Home		
Creager, Mary	31	F	Michigan	Y	Y	At Home		
Stubengan?, Joseph	34	M	Poland	Y	Y	Laborer		
Stubengan, Elizabeth	30	F	Poland	Y	Y	Keeping House		
Stubengan, Jamie	8	M	Michigan	Y	Y	At Home		
Stubengan, Mary	5	F	Michigan	Y	Y	At Home		
Stubengan, Joseph	3	M	Michigan	Y	Y	At Home		
Creager, John	36	М	Prussia	Y	Y	Laborer		
Creager, Elizabeth	32	F	Prussia	Y	Y	Keeping House		
Creager, Catherine	6	F	Michigan	Y	Y	At Home		
Creager, John	4	M	Michigan	Y	Υ	At Home		
Creager, Mary	2	F	Michigan	Y	Y	At Home		
Quest?, Adam	30	M	Sweden	Y	Y	Fisherman		
Trust, George	28	M	Denmark	Y	Y	Fisherman		
Harman, John	35	M	Saxony	Y	Y	Fisherman		
Lherku, Adam	19	М	Poland	Y	Y	Laboter		
Raymer, George	40	M	Canada	Y	Y	Fisherman	250	
Raymer, Louisa	36	F	Canada	Y	Y	Keeping House		
Raymer, Lewie	18	M	Canada	Y	Y	At Home		
Raymer, Carrie	9	H	Canada	Y	Y	At l·Iome		
Raymer, James	6	M	Canada	Y	Y	At Home		
Raymer, George	3	M	Canada	Y	Y	At Home		
Luneburg, John	35	М	Sweden	Y	Y	Laborer		
Luneburg, Peter	30	M	Sweden	Y	Y	Laborer		
Hanson, Frank	54	M	I-lanover	Y	Y	Laborer		
Hanson, Christina	42	þ	Sweden	Y	Y	Keeping House		
Tramel, Barbis?	45	M	Bayaria	Y	Y	Laborer		

TABLE D-3 Federal Census of Population North Manitou Island

1880¹

Name	Relationship	Sex	Age	Marital Status	Place of Birth	Father's Place of Birth	Mother's Place of Birth	Occupation
Anderson, Andrew	Head	М	54	Single	Sweden	Sweden	Sweden	Farmer
Swan, Gustav O.	Head	M	58	Married	Sweden	Sweden	Sweden	Farmer
Swan, Mary	Wife	F	62	Married	Sweden	Sweden	Sweden	Keeping House
Charlson, Nelson	Head	M	26	Married	Sweden	Sweden	Sweden	Fisherman
Charlson, Johanna	Wife	F	23	Married	Sweden	Sweden	Sweden	Keeping House
Charlson, William	Son	M	2		Michigan	Sweden	Sweden	. 0
Charlson, Amanda Pauline	Daughter	F,	6 mos.		Michigan	Sweden	Sweden	
Nelson, John	Head	M	40	Widowed	Sweden	Sweden	Sweden	Fisherman
Erickson, Andrew	Boarder	M	49	Widowed	Sweden	Sweden	Sweden	Fisherman
Johnson, Samuel	Head	M	28	Single	Denmark	Denmark	Denmark	Fisherman
Floyd, John	Head	M	38	Married	Massachusetts	Ireland	Ireland	Fisherman
Floyd, Maria	Wife	F	28	Married	Michigan	Scotland	Canada	Keeping House
loyd, George	Son	M	8		Michigan	Massachusetts	Michigan	
loyd, John	Son	M	5		Michigan	Massachusetts	Michigan	
Floyd, Edward	Son	M	3		Michigan	Massachusetts	Michigan	
Floyd, Mary	Daughter	¥	1		Michigan	Massachusetts	Michigan	
Gallagher, Francis	Step Son	M	11		Michigan	Ireland	Canada	No occupation
Hanson, Frank	Head	M	64	Widowed	Hanover	Hanover	Hanover	Farmer
Larson, Larson	Head	M	38	Married	Sweden	Sweden	Sweden	Farmer
arson, Mary	Wife	F	24	Married	Wisconsin	Ireland	Ireland	Keeping House
arson, Josephine	Daughter	F	6		Michigan	Sweden	Wisconsin	
Larson, Rudolph	Son	M	4		Michigan	Sweden	Wisconsin	
arson, William	Son	M	2		Michigan	Sweden	Wisconsin	
arson, Charles	Son	M	5 mos.		Michigan	Sweden	Wisconsin	
Chickee, Frances	Head	F	24	Widowed	Prussia	Prussia	Prussia	Washer-woman
Chickee, Frances	Daughter	f	11		Wisconsin	Prussia	Prussia	At Home
Chickee, Martha	Daughter	F	6		Wisconsin	Prussia	Prussia	
Thickee, Mary	Daughter	F	3		Wisconsin	Prussia	Prussia	
ramel, Baptist	Head	M	65	Single	Baer	Baer	Baer	Farmer

¹ Individual names are grouped according to household, and listed in the order that they appear on the manuscript schedules.

Name	Relationship	Sex	Age	Marital Status	Place of Birth	Father's Place of Birth	Mother's Place of Birth	Occupation
Malshiska, Adam	Head	M	26	Married	Prussia	Prussia	Prussia	Fisherman
Malshiska, Mary	Wife	F	28	Married	Prussia	Prussia	Prussia	Keeping House
Malshiska, Mary	Daughter	k	7		Wisconsin	Prussia	Prussia	. 0
Malshiska, Anastacia	Daughter	F	5		Wisconsin	Prussia	Prussia	
Malshiska, Elizabeth	Daughter	F	4		Wisconsin	Prussia	Prussia	
Malshiska, Josephine	Daughter	F	1		Wisconsin	Prussia	Prussia	
Malshiska, Martha	Daughter	F	2 mos.		Wisconsin	Prussia	Prussia	
Etli, Francis	Head	M	55	Married	Switzerland	Switzerland	Switzerland	Farmer
Etli, Anna	Wife	F	48	Married	Prussia	Prussia	Prussia	Keeping House
trang, John	Head	М	46	Married	Poland	Poland	Poland	Farmer
Strang, Frances	Wife	F	39	Married	Poland	Poland	Poland	Keeping House
Strang, Michael	Son	M	8		Wisconsin	Poland	Poland	1 0
Strang, John	Son	M	6		Michigan	Poland	Poland	
Strang, Victoria	Daughter	F	5		Michigan	Poland	Poland	
Strang, Francis	Son	M	3		Michigan	Poland	Poland	
Strang, Alicia	Daughter	F	1		Michigan	Poland	Poland	
Olsen, Hans	Head	M	36	Married	Norway	Norway	Norway	Blacksmith
Olsen, Dora	Wife	F	30	Married	Hamburgh	Hamburgh	Hamburgh	Keeping House
Olsen, Charles O.	Son	M	2		Michigan	Norway	Hamburgh	y and parity and
Pastschow, George	Head	M	66	Married	Mecklenburgh	Mecklenburgh	Mecklenburgh	Fisherman
Pastschow, Carolina	Wife	F	62	Married	Mecklenburgh	Mecklenburgh	Mecklenburgh	Keeping House
Pastschow, Frederick	Son	M	35	Single	Mecklenburgh	Mecklenburgh	Mecklenburgh	Sailor
astschow, Elizabeth	Daughter	F	30	Single	Denmark	Mecklenburgh	Mecklenburgh	No occupation
Pastschow, John	Son	M	26	Single	Denmark	Mecklenburgh	Mecklenburgh	Sailor
Pastschow, Henry	Son	M	22	Single	Denmark	Mecklenburgh	Mecklenburgh	Fisherman
Pastschow, Charles	Son	M	28	Married	Denmark	Mecklenburgh	Mecklenburgh	Carpenter
Pastschow, Margarett	Wife	F	26	Married	Denmark	Denmark	Denmark	Keeping House
Pastschow, George	Son	M	1		Denmark	Denmark	Denmark	- 100pmig 1 100sc
rederickson, Annail?		M	39	Married	Denmark	Denmark	Denmark	Fisherman
rederickson, Johannah	Wife	F	43	Married	Denmark	Denmark	Denmark	Keeping House
rederickson, George	Son	M	11		Denmark	Denmark	Denmark	At Home
rederickson, Maria	Daughter	F.	10		Denmark	Denmark	Denmark	At Home
rederickson, Helena	Daughter	E.	8		Denmark	Denmark	Denmark	At Home
rederickson, Matilda	Daughter	F	5		Denmark	Denmark	Denmark	
	Sister	r F	24		Denmark	Denmark Denmark	Denmark Denmark	
rederickson, Victorina	oister	Г	<i>2.</i> 4		Deminik	Designation	Dennark	
Buss, Daniel	Head	M	36	Married	New York	New York	New York	Wood Merchant
Buss, Mary	Wife	F	36	Married	Michigan	New York	Canada	Keeping House
Buss, Jemmima?	Mother	F	64	Widowed	New York	New York	New York	No Occupation
Buss, Leander	Son	M	9		Michigan	New York	Canada	
Buss, Lulu	Daughter	F	5		Minnesota	New York	Canada	

Name	Relationship	Sex	Age	Marital Status	Place of Birth	Father's Place of Birth	Mother's Place of Birth	Occupation
Wiles, Charles	Head	M	35	Married	New York	New York	New York	Laborer
Wiles, Lucy	Wife	F	39	Married	New York	Scotland	Canada	Keeping House
Wiles, Sarah	Daughter	μ	11		Michigan	New York	New York	At Home
Wiles, Charlotte	Daughter	H	9		Michigan	New York	New York	

TABLE D-4

Federal Census of Population North Manitou Island

 1900^{1}

Name	Relationship	Sex	Age	Marital Status	Years Married	Place of Birth	Father's Place of Birth	Mother's Place of Birth	Year of Immigration	Occupation
Anderson, John Anderson, Ildra Anderson, Albert O. Anderson, Ada J.? Anderson, Martin N. Anderson, George B.	Head Wife Son Daughter Son Daughter	M F M F M	40 26 11 8 4	Married Married	10 yrs. 10 yrs.	Norway Norway	Norway Norway Norway Norway	Norway Norway Norway Norway	1882 1889	Farmer Keeping House At School At School
McKunnan, John	I-lead	M								
Samuelson, Fred	Boarder	M	28	Single		Wisconsin?				Lightkeeper
Frederickson, Henry	1-lead	M	59	Married	20yrs.	Denmark				Fisherman
Johnson?, John Johnson, Annistine? Johnson, ? Johnson, ? Johnson, ?	Head Wife Child Child Child	M F	53 54	Married Married	29 yrs. 29 yrs.	Sweden Sweden			1870 1870	Farmer Keeping House
Olestrom, Christian Olestrom, Nartha? Olestrom, ? Olestrom, ?	Head Wife Child Child	M F	48 45?	Married Married	26 yrs. 26 yrs.	Sweden Sweden			1884	Farmer Keeping House
Swenson, Peter Swenson, Mary Swenson, Theobalda Swenson, Peter M.	Head Wife Daughter Son	M F F M	38 27 7 2	Married Married	3 yrs. 3 yrs.	Sweden Norway Norway Michigan	Sweden Sweden	Norway Norway	1885 1895 1895	Farmer Keeping House
Drow, Philip Drow, Ellenora? Drow, Napolian Drow, Josephine Drow, Salina? Drow, Elizabeth Drow, Noah Drow, Ernest	Head Wife Son Daughter Daughter Daughter Son Son	M F M F F M M	40 37 12 10 8 6 5	Married Married	20 yrs. 20 yrs.	Michigan Illinois	France	l'rance		Farmer Keeping House
Drow, Loily?	Son Daughter	₽ W	3 mos.							

¹ Individual names are grouped according to household, and listed in the order that they appear on the manuscript schedules.

Name	Relationship	Sex	Age	Marital Status	Years Married	Place of Birth	Father's Place of Birth	Mother's Place of Birth	Year of Immigration	Occupation
Carlson, Nelson	Head	M	43	Married	23 yrs.	Sweden			1876	Farmer
Carlson, Sophia	Wife	F	42	Married	23 yrs.	Sweden			1876	Keeping House
Carlson, William	Son	M	22							Farm Laborer
Carlson, Oscar	Son	M	17							Farm Laborer?
Carlson, Hilda	Daughter	F	15							At school
Carlson, Jered	Son	M	13							Atschool
Carlson, Alfred	Son	M	11							At school
Carlson, Millie	Daughter	F	9							Atschool
Carlson, Adam	Son	M	7							At school
Carlson, Esther	Daughter	F	4							
Carlson, Irving	Son	M	2							
Carlson, Baby	Son	M	1 mo.							
Maleski, Adam	Head	M	52	Married	30 yrs.	Poland/Germ.			1878	Fisherman
Maleski, Christina	Wife	F	51	Married	30 yrs.	Poland/Germ.			1878	Keeping House
Maleski, Frederick	Son	M	17		·					At School
Maleski, John	Son	M	14							At School
Anderson, Christian (?)	Head	M								Fisherman
Firestone, Albert	Head	M								Farm Laborer
elin, Nicholas	Boarder	M	48			Illinois	Germany	Germany		Carpenter

TABLE D-5

Federal Census of Population North Manitou Island

1910

Name	Relationship	Sex	Age	Marital Status	Years Married	Place of Birth	Father's Place of Birth	Mother's Place of Birth	Year of Immigration	Occupation
Dustin, Lorril?	Head	M	47	Married	9	Illinois	Ohio	Ohio		USLS Station
Dustin, Anna	Wife	F	37	Married	9	Michigan	?	7		
Dustin, George F.	Son	M	8			Michigan	Illinois	Ohio		
Dustin, Fredie? H.	Son	M	6			Michigan	Illinois	Ohio		
Smith, Cass?	Head	М	32	Married	1	Michigan	Germany	New York		USLS Station
Smith, Emma	Wife	F	26	Married	1	Michigan	Norway	Norway		
Carter, George	Head	M	54	Married	24	New York	7	?	?	Engineer
Carter, Emma	Wife	F	40	Married	24	Canada (Eng.)	Canada (Fr.)	Canada (Eng.)	7	Hotel
Carter, Isabell	Daughter	F	16	Single		Michigan	New York	Canada (Eng.)		
Birdsey, Mary	Servant	F	19	Single		Michigan	New York	New York		Hotel Servant
St. Peters, ????	Boarder	M	69	Widowed?		Canada (Fr.)	Canada (Fr.)	Canada (Fr.)	1852	USLS Station (Captain)
Pugh, Walter	Boarder	M	28	Single		Michigan	Michigan	Michigan		USLS Station
Newhall, John	Boarder	M	27	Single		Illinois	Illinois	New York		Fruit Farmer
/oice, Harold	Boarder	M	20	Single		Michigan	Michigan	Michigan		General Store Manager
ohnson, Charles	Boarder	M	20	Single		Sweden	Sweden	Sweden		Farm Laborer
ohnson, ????	Boarder	M	25	Single		Sweden	Sweden	Sweden	1909	Farm Laborer
lyers, George	Boarder	M	22	Single		Michigan	New York	New York		Laborer
Nyers, ????	Boarder	M	24	Single		Michigan	New York	New York		Laborer
Maleska, Adam	Head	M	57	Married	37	Germany	Germany	Germany		Horse Farmer
Maleska, Mary	Wife	F	58	Married	37	Germany	Germany	Germany		
Maleska, Paul	Son	M	26	Single		Michigan	Germany	Germany		Rural Route Mail Carrier
Maleska, John	Son	M	24	Single		Michigan	Germany	Germany		Fisherman
Berethaupt?, Bart?	1-lead	M	25	Married	1	Michigan	Michigan	Michigan		Laborer
Berethaupt, Mary	Wife	F	27?	Married	1	Michigan	Norway	Germany		
Berethaupt, Dorothea?	Daughter	F	5 mos.	?		Michigan	Michigan	Michigan		
Sheriff, Frank	Head	M	26	Married	0	Michigan	England	England		Laborer
Sheriff, Violet	Wife	ዞ	21	Married	0	Michigan	Unknown	Michigan		
Miller, Fred	Head	М	26	Married	4	Germany	Germany	Germany	1884	USLS Station
Miller, Ellen	Wife	F	26	Married	4	Michigan	Norway	New York		
Miller, Walter	Son	M	3			Michigan	Germany	Michigan		
Miller, Hazel	Daughter	F	18 mos	i.		Michigan	Germany	Michigan		
Anderson, Abraham	Head	M	44	Married	9	Norway	Norway	Norway	1885	USLS Station
Anderson Anna	Wife -	H	_36	Married	9	Michigan	Germany	Germany		

Name	Relationship	Sex	Age	Marital Status	Years Married	Place of Birth	Father's Place of Birth	Mother's Place of Birth	Year of Immigration	Occupation
Anderson, Alfred	Son	M	8		<u> </u>	Michigan	Nonvay	Michigan		
Anderson, Ethel	Daughter	F	6			Michigan	Norway	Michigan		
Anderson, Margeret	Daughter	F	2			Michigan	Norway	Michigan		
Pastschow, Johnnie	Head	M	26	Married	3	Michigan	Germany	Sweden		US Mail Carrier
Pastschow, Bessie	Wife	F	19	Married	3	Michigan	Indiana	Norway		
Pastschow, Albert	Son	M	2			Michigan	Michigan	Michigan		
Talstead, Hans	I-Iead	M	42	Married	18	Norway	Nonvay	Norway	1888	USLS Station
Ialstead, Ida	Wife	F	39	Married	18	Norway	Norway	Norway		
Ialstead, Anna	Sister	F	50?	Single		Norway	Norway	Norway		
Nelson, Bertha	Sister-in-law	F	24	Single		Michigan	Norway	Norway		
Gorden?, William	Head	M	37	Married	13	Michigan	United States	Ohio		Odd Jobs
Forden, Letta	Wife	k	31	Married	13	Michigan	Canada (Eng.)	New York		
Gorden, Gladys	Daughter	\mathbf{F}	11			Michigan	Michigan	Michigan		
Forden, Irv?	Son	M	9			Michigan	Michigan	Michigan		
Forden, Ernest	Son	M	6			Michigan	Michigan	Michigan		
Gorden, Ray	Son	M	4			Michigan	Michigan	Michigan		
Forden, Minnie	Daughter	P	3 mos.			Michigan	Michigan	Michigan		
atschow, John	Head	M	54	Single		Denmark	German	German	1872	Fisherman
Journique?, Alva? L.	Head	M	44	Married	8	Illinois	France	France		Dancing Instructor
loutnique, Mary	Wife	H	27	Married	8	Missouri	Ohio	Ohio		
Sournique, Elizabeth	Daughter	F	7			Illinois	Illinois	Missouri		
Bournique, Mary L.	Daughter	F	3			Illinois	Illinois	Missouri		
ohnson, Reginald?	Head	M	29	Married	3	Sweden	Sweden	Sweden	1888	Third Light?
ohnson, Catherine	Wife	F	21	Married	3	Michigan	Michigan	France		
ohnson, Evelyn	Daughter	F	18 mos.			Michigan	Sweden	Michigan		
Cornell, Edward	Head	M	49	Married	15	Illinois	New York	New York		USLH Service
Cornell, Johanna	Wife	F	42	Married	15	Norway	Norway	Norway		
Comell, Flo	Daughter	F	10			Wisconsin	Illinois	Norway		
ornell, Edna J.	Daughter	F	2			Wisconsin	Illinois	Norway		
ornell, Wanette	Daughter	F	6 mos.			Michigan	Illinois	Norway		
Vright, Ross F.	Boarder	M	32	Single		Wisconsin	New York	Wisconsin		Lightkeeper
eilen, Nicholas	Head	M	58	Single		Illinois	Germany	Germany		Carpenter
ohnson?, John P.	Head	M	63	Married	40	Sweden	Sweden	Sweden	1887	Farmer
ohnson, Wandla	Wife	h.	67	Married	40	Sweden	Sweden	Sweden		

Name	Relationship	Sex	Age	Marital Status	Years Married	Place of Birth	Father's Place of Birth	Mother's Place of Birth	Year of Immigration	Occupation
Swenson, Peter	Head	M	49	Married	13	Sweden	Sweden	Sweden	1881	Fisherman
Swenson, Marie	Wife	F	37	Married	13	Norway	Norway	Norway		
Swenson, Enos	Son	M	12			Michigan	Sweden	Norway		
Swenson, Eva L.	Daughter	F	14 mos.			Michigan	Sweden	Norway		
White, Andrew	Head	M	44?	Married	24	Ohio	Scotland	Scotland		Saw Mill ????
White, Clarah	Wife	F	42	Married	24	Michigan	Ohio	Ohio		
White, Clarah	Son	M	20	Single		Michigan	Ohio	Michigan		Saw Mill Engineer
White, Esther	Daughter	F	9			Michigan	Ohio	Michigan		8
Halverson, Billi?	Boarder	F	27	Single		Michigan	Norway	Norway		Teacher
Grosvenor, Dorge?	Head	M	41	Married	13	Ohio	United States	Connecticut		Saw Mill
Grosvenor, Dora	Wife	F	55	Married	13	Ohio	Ohio	Connecticut		
Murs, Fred	Step Son	M	37	Married	12	Indiana	Pennsylvania	Ohio		Odd Jobs
Lothschute, Iva	Daughter	F	17	Married	1	Michigan	Ohio	Michigan		•
othschute, Tracy	Son	M	16	Single		Michigan	Ohio	Michigan		Odd Jobs
othschute, Margerie?	Grand-daughter	F	3 mos.			Michigan	Michigan	Michigan		,
Nurfer?, Clyde H.	Head	M	3.3	Married	3	Indiana	New York	Pennsylvania		Odd Jobs
Vurfer, Dena	Wife	F	27	Married	3	Michigan	Norway	Norway		
Nurfer, Claire	Daughter	F	2			Michigan	Indiana	Michigan		
Nurfer, Karl A.	Son	M	10 mos.			Michigan	Indiana	Michigan		
Kinimson?, Henry	Head	M	29	Married	1	Michigan	Germany	Michigan		Odd Jobs
Kinimson, Emma	Wife	F	22	Married	1	Michigan	New York	Michigan		,
Gray?, Bert	Head	M	39	Married	4	Michigan	Unknown	Unknown		Odd Jobs
Gray, Rose	Wife	F	22	Married	4	Ohio	Germany	Germany		•
Ednil, Noah	Head	M	30	Married	6	Michigan	Sweden	Ireland		
Ednil, Susan	Wife	F	30	Married	6	Michigan	Ireland	Ireland		
Ednil, Hazel	Daughter	F	3			Michigan	Michigan	Michigan		
Clark, John	Head	M	24	Married	2	Michigan	Michigan	Vermont		Odd Jobs
Clark, Ada	Wife	F	20	Married	2	Maryland	England	England		
Clark, Anthony	Son	M	7 mos.			Michigan	Michigan	Maryland		
Clark, Arthur	Brother	M	20	Single		Michigan	Michigan	Vermont		
Oleson, Eisten?	Head	M	55	Married	27	Norway	Norway	Norway	1881	Odd Jobs
Oleson, Ellen	Wife	F	51	Married	27	Norway	Norway	Norway		

Name	Relationship	Sex	Age	Marital Status	Years Married	Place of Birth	Father's Place of Birth	Mother's Place of Birth	Year of Immigration	Occupation
Kiddell, A.J.	Head	M	42	Married	2	Michigan	Michigan	Michigan		Odd Jobs
Kiddell, Ida	Wife	F	30	Married	2	Indiana	Indiana	Indiana		, and the second
Kiddell, Thelma	Daughter	F	11			Michigan	Michigan	Indiana		
Kiddell, Bernice	Daughter	F	6			Michigan	Michigan	Indiana		
Kiddell, Francis	Daughter	F	5			Michigan	Michigan	Indiana		
Kiddell, George	Son	M	18 mos.			Michigan	Michigan	Indiana		
Yournsus?, Edward	Head	M	33	Married	4	New York	New York	United States		Shingle Mill
Youmsus, Margery	Wife	F	26	Married	4	Michigan	New York	Canada (Irish)		
Youmsus,Frank	Son	M	4			Michigan	New York	Michigan		
Poaleski?, Joseph	Head	M	39	Married	16	German	German	German	1872	Saw Mill (Edger)
Poaleski, Mary	Wife	F	33	Married	16	Michigan	German	German		, , ,
Poaleski, Frank	Son	M	15			Michigan	German	Michigan		
Poaleski, Mary	Daughter	F	6			Michigan	German	Michigan		
Poaleski, Alfred	Son	M	4			Michigan	German	Michigan		
Poaleski, Agnes	Daughter	F	2			Michigan	Gennan	Michigan		
Brown, Manfred	Head	M	60	Married	27	Ohio	New York	Indiana		Carpenter
Brown, Hattie	Wife	F	42	Married		Indiana	Pennsylvania	Ohio		
Brown, Ada	Daughter	F	17	Single		Michigan	Ohio	Indiana		Servant
Bernard, George	Head	M	39	Married	20	Canada (Eng.)	Canada (Eng.)	Canada (Scot.)	1871	Night Watchman (Steam Engine)
Bernard, Emma	Wife	F	36	Married	20	Michigan	Michigan	New York		Dress Maker (At Horne)
Bernard, William	Son	M	18	Single		Michigan	Canada (Eng.)	Michigan		Odd Jobs
Bernard, Lillian	Daughter	F	16	Single		Michigan	Canada (Eng.)	Michigan		Housekeeper (At Home)
Bernard, Louis	Son	M	11			Michigan	Canada (Eng.)	Michigan		
Bernard, Lena	Daughter	F	9			Michigan	Canada (Eng.)	Michigan		
Bernard, Lynn	Son	M	8			Michigan	Canada (Eng.)	Michigan		
Bernard, Genevive	Daughter	F	5			Michigan	Canada (Eng.)	Michigan		
Kimball, Frank	Head	M	43	Married	10	Pennsylvania	Pennsylvania	Pennsylvania		Stone Mason
Kimball, Clara	Wife	F	42	Married	10	Michigan	New York	England		
Wise, Edward	Son?	M	17	Single		Michigan	Ohio	Michigan		Odd Jobs
Wise, Nelson	Step Son	M	18	Single		Michigan	Ohio	Michigan		Odd Jobs
Gibson, Louis	Head	M	43	Married	15	Michigan	Unknown	Unknown		Odd Jobs
Gibson, Margaret	Wife	F	38	Married	15	Michigan	Ireland	New York		
Gibson, Ellen	Daughter	F	14			Michigan	Michigan	Michigan		
Gibson, Ralph	Son	M	13			Michigan	Michigan	Michigan		
Gibson, Earl	Son	M	11			Michigan	Michigan	Michigan		
Gibson, Alice	Daughter	F	7			Michigan	Michigan	Michigan		

North Manitou Island Population, 1910 (continued)

Name	Relationship	Sex	Age	Marital Status	Years Married	Place of Birth	Father's Place of Birth	Mother's Place of Birth	Year of Immigration	Occupation
Henderson, Mirian	I-lead	M	36	Married	10	Michigan	United States	England		Odd Jobs
Henderson, Eva	Wife	F	25	Married	10	Michigan	Michigan	Michigan		y
Henderson, Earl	Son	M	2			Michigan	Michigan	Michigan		
Henderson, Pearl	Daughter	F	11 mos.			Michigan	Michigan	Michigan		
Thiel?, Phillip	Head	M	25	Married	2	Michigan	Germany	Germany		
Thiel, Jennie	Wife	F	21	Married	2	Michigan	New York	New York		General Store (Proprietor)
Thiel, Donald	Son	M	18 mos.			Michigan	Michigan	Michigan		y
Johnson, Phillip	Head	М	39	Married	6	Michigan	German	France		Lumber Manufacture (Manage
Johnson, Nellie	Wife	F	31	Married	6	Michigan	New York	(Can.) German		224-1201
La Core, Ott M.	Head	M	35	Married	4	Michigan	Michigan	New York		Doctor
La Core, Ethel	Wife	F	24	Married	4	Michigan	Wisconsin	Michigan		-
La Core, Annette	Daughter	F	2			Michigan	Michigan	Michigan		
La Core, Jeita? B.	Daughter	F	6 mos.			Michigan	Michigan	Michigan		
ones, Susan	Servant	F	66	Widowed		New York	New York	Pennsylvania		Servant
Yehita?, Adam	Head	M	29	Married	0	Michigan	Scotland	Scotland		Night Watchman (Sawmill)
Yehita, Bertha	Wife	F	20	Married	0	Michigan	Germany	Michigan		g
Miser, Joseph	l-lead	M	44	Married	17	Michigan	Germany	England		Hotel Proprietor
Miser, Carrie	Wife	F	35	Married	17	Michigan	Germany	Michigan		•
Miser, Viola	Daughter	F	15	Single		Michigan	Michigan	Michigan		
Miser, Buclah	Daughter	F	13	_		Michigan	Michigan	Michigan		
Miser, Pearl	Daughter	F .	19 mos.			Michigan	Michigan	Michigan		
Anderson, Clara	Servant	F	21	Single		Michigan	Norway	Norway		Hotel Servant
Hetcher, Dick	Boarder	M	50	Single		New York	Vermont	Canada (Eng.)		Odd Jobs
Klinski, Pete	Boarder	M	27	Single		Wisconsin	Germany	Germany		Odd Jobs
Gieldans, Edward	Boarder	M	35	Single		Norway	Norway	Norway	1904	Odd Jobs
Gorden, Miles	Boarder	M	24	Single		Virginia	Ireland	Ireland		Odd Jobs
Good, William	Boarder	M.	31	Single		Michigan	Scotland	Scotland		Saw Mill (Fireman)
Brinkman, Morris	Boarder	M	20	Single		Michigan	Unknown	Michigan		Odd Jobs
Barthamew, Vern	Boarder	M	26	Single		Michigan	Michigan	Michigan		Saw Mill (Fireman)
Mapes, Frank	Boarder	M	56	Married	26	New York	New York	Ohio		Saw Mill
Brook, Ralph	Boarder	M	20	Single		Michigan	Ohio	Michigan		Odd Jobs
Robbot, John	Boarder	M	19	Single		Michigan	(Aust.) Polish	(Aust.) Polish		Odd Jobs
Aoin?, Glen	Boarder	M	21	Single		Wisconsin	Michigan	Pennsylvania		Odd Jobs
Ask, Nels	Boarder	M	17	Single		Michigan	Norway	Norway		Odd Jobs
Ledlow, Jim	Boarder	M	20	Single		Michigan	(Can.) German	England		l-Iotel Barber
Marsh, Porman?	Boarder	M	24	Single		Michigan	Vermont	Canada (Eng.)		Lumber Camp (Blacksmith)
Ramson, Walter	Head	M	23	Married	3	Michigan	Michigan	Unknown		Odd Jobs
Ramson, Nina	Wife	F	19	Married	3	Michigan	Michigan	Ohio		
Ramson, Hiriam	Son	M	3	Single	_	Michigan	Michigan	Michigan		

North Manitou Island Population, 1910 (continued)

Name	Relationship	Sex	Age	Marital Status	Years Married	Place of Birth	Father's Place of Birth	Mother's Place of Birth	Year of Immigration	Occupation
Codi, Jermie?	Head	M	33	Married	0	Michigan	Michigan	Canada (Fr.)		Lumber Camp Cook
Codi, Florence	Wife	F	19	Married	0	Michigan	Canada (Eng.)	Michigan		•
Yonkers?, John	Head	M	33	Married	7	Michigan	Holland	Holland		Lumber Camp Assistant Cook
Yonkers, Gertrude	Wife	F	24	Married	7	Michigan	Michigan	Michigan		•
Yonkers, Durward	Son	M	5			Michigan	Michigan	Michigan		
Elmwell?, Ernest	Brother-in-Law	M	19	Single		Michigan	Michigan	Michigan		
Sergent, Scott	Head	M	26	Single		Kentucky	Kentucky	Kentucky		Lumber Camp Book Keeper

TABLE D-6

Federal Census of Population North Manitou Island

1920¹

Name	Relationship	Sex	Age	Marital Status	Place of Birth	Father's P.O.B. / Language	Mother's P.O.B. / Language	Year of Immigration	Occupation
Maleski, John	Head	M	34	Married	Michigan	German Poland/Polish	German Poland/Polish		Farm Laborer
Maleski, Anna	Wife	F	22	Married	Michigan	German Poland/Polish	German Poland/Polish		
Maleski, Gertrude	Daughter	F	5		Michigan	Michigan	Michigan		
Maleski, Raymond	Son	M	3		Michigan	Michigan	Michigan		
Maleski, Ellis	Son	M	23 mos.		Michigan	Michigan	Michigan		
Maleski, John	Son	M	3 mos.		Michigan	Michigan	Michigan		
Stormer?, Peter Sr.	Head	M	39	Married	Michigan	Germany/German	Germany/German		Logging
Stormer, Helen E.	Wife	F	46	Married	Michigan	England/English	Michigan		
Stormer, Joseph	Son	M	20	Single	Michigan	Michigan	Michigan		Life Saver, U.S. Coast Guard
Stormer, Henry	Son	M	17	Single	Michigan	Michigan	Michigan		Farm Laborer
Stormer, Lewis	Son	M	16	Single	Michigan	Michigan	Michigan		
Stormer, John	Son	M	15	Single	Michigan	Michigan	Michigan		
Stormer, Harold	Son	M	9		Michigan	Michigan	Michigan		
Stormer, Benjamin	Son	M	7		Michigan	Michigan	Michigan		
Kelanske, Agnes	Boarder	F	24	Single	Michigan	Michigan	Michigan		Teacher, Rural School
Hall, Joseph	Boarder	M	20	Single	Michigan	Michigan	Michigan		Wood Chopper, Lumber Camp
Cutier, William H.	Boarder	M	57	Widowed	Michigan	England/English	Michigan		Log Cutter, Lumber Camp
Oien, Ghoest?	Boarder	M	30	Single	Norway	Norway/Norwegian	Norway/Norwegian	1908	Log Cutter, Lumber Camp
l'obin, Mike	Boarder	M	57	Single	Canada	Ireland/Irish	Ireland/Irish	1866	Team Driver?
Ramsey, Joseph	Boarder	M	64	Widowed	Pennsylvania	Pennsylvania	Pennsylvania		Log Cutter, Lumber Camp
Ramsey, Robert	Boarder	M	61	Single	Pennsylvania	Pennsylvania	Pennsylvania		Log Cutter, Lumber Camp
Barr, Edward	Boarder	M	53	Widowed	Michigan	Michigan	Michigan		Log Cutter, Lumber Camp
Marsh, Joseph J.	Head	M	27	Married	Michigan	Michigan	Canada/English		Light Keeper, U.S. Lighthouse
Marsh, Gillian B.	Wife	F	24	Married	England	England/English	England/English	Unknown	
Marsh, Joseph J. J.	Son	M	22 mos.		Michigan	Michigan	England/English		
Hutzler, Ernest B.	Head	M	38	Married	Michigan	New York	Sweden/Swedish		Keeper, U.S. Lighthouse
Hutzler, Jella?	Wife	F	35	Married	Michigan	Michigan	Canada/English		
Hutzler, George	Son	M	14 mos.		Michigan	Michigan	Michigan		
Furst, Ethel	Step Daughter	F	14		Michigan	Michigan	Michigan		
Furst, Norman	Step Son	M	11		Michigan	Michigan	Michigan		
Furst, Glen	Step Son	M	7		Michigan	Michigan	Michigan		
Froats?, Ralph H.	Head	M	48	Married	Canada	Canada/English	Canada/English	1884	Hired Farm Manager
Froats, Mary	Wife	F	45	Married	Michigan	Holland/Dutch	Holland/Dutch		
Froats, Louise	Daughter	F	4		Michigan	Canada/English	Michigan		
Froats, Luella	Daughter	F	4		Michigan	Canada/English	Michigan		

¹ Individual names are grouped according to household, and listed in the order that they appear on the manuscript schedules.

North Manitou Island Population, 1920 (continued)

Name	Relationship	Sex	Age	Marital Status	Place of Birth	Father's P.O.B. / Language	Mother's P.O.B. / Language	Year of Immigration	Occupation
Palmer, Nels	Head	M	46	Married	Sweden	Sweden/Swedish	Denmark/Danish	1891	Keeper, U.S. Coast Guard
Palmer, Anna C.	Wife	F	38	Married	Michigan	Michigan	Michigan		
Palmer, Gordon	Son	M	18	Single	Michigan	Sweden/Danish	Michigan		
Palmer, Stanley	Son	M	15	Single	Michigan	Sweden/Danish	Michigan		
Anderson, Abraham	Head	M	52	Married	Norway	Norway/Norwegian	Norway/Norwegian		Life Saver, U.S. Coast Guard
Anderson, Anna L.	Wife	F	47	Married	Michigan	Germany/German	Germany/Norwegian		
Anderson, Alex? M.	Son	M	18	Single	Michigan	Norway/Norwegian	Michigan		
Anderson, Ethel	Daughter	F	15	Single	Michigan	Norway/Norwegian	Michigan		
Anderson, Margaret L.	Daughter	F	12		Michigan	Norway/Norwegian	Michigan		
Oustin, Louis G.	Head	M	57	Married	Illinois	Illinois	Illinois		Life Saver, U.S. Coast Guard
Dustin, Anna H.	Wife	F	47	Married	Michigan	Germany/German	Germany/German		
Dustin, George F.	Son	M	18	Single	Michigan	Illinois	Michigan		
Dustin, Fredrick H.	Son	M	16	Single	Michigan	Illinois	Michigan		
Joeft, Louis	Nephew	M	14	.,	Michigan	Michigan	Michigan		
Halseth, Hans P.	Head	M	52	Married	Norway	Norway/Norwegian	Norway/Norwegian	1888	Life Saver, U.S. Coast Guard
Ialseth, Ida N.	Wife	F	49	Married	Norway	Sweden/Swedish	Norway/Norwegian	unknown	
Ialseth, Anna M.	Half-sister	F	15	Single	Michigan	Norway/Norwegian	Norway/Norwegian		
Jelson, Aeden	Nephew	M	11	O	Michigan	Norway/Norwegian	Norway/Norwegian		
asch, John A.	Head	M	35	Married	Michigan	Germany/German	Germany/German		Life Saver, U.S. Coast Guard
Basch, Bertha R.	Wife	F	25	Married	Michigan	Sweden/Swedish	Norway/Norwegian		
asch, Sherwood J.	Son	M	2		Michigan	Michigan	Michigan		
aird, Thomas B.	Head	M	41	Married	Michigan	Ireland/English	Michigan		Life Saver, U.S. Coast Guard
aird, Jessie Belle	Wife	F	40	Married	Michigan	Michigan	Michigan		
aird, William I.	Son	M	18	Single	Michigan	Michigan	Michigan		Life Saver, U.S. Coast Guard
aird, Alice	Daughter	F	15	Single	Michigan	Michigan	Michigan		
aird, Raymond	Son	M	12	Ü	Michigan	Michigan	Michigan		
aird, Lottie	Daughter	F	5		Michigan	Michigan	Michigan		
aird, Robert	Son	M	2		Michigan	Michigan	Michigan		
Mosier, Louis N.	Head	M	19	Married	Michigan	Michigan	Michigan		Life Saver, U.S. Coast Guard
Mosier, Carrie H	Wife	F	21	Married	Michigan	Michigan	Norway/Norwegian		
Mosier, Bernice J.	Daughter	F	1 mo.		Michigan	Michigan	Michigan		
eilen, Nicholas	Head	M	67	Single	Illinois	Germany/German	Germany/German		House Carpenter
Pastschow, John	Head	M	63	Single	Denmark	Germany/German	Germany/German	1878	Fisherman
Olson, Charles	Head	M	56	Married	Norway	Norway/Norwegian	Norway/Norwegian	1879	Steamboat Seaman
Olson, Sigrid	Wife	F	53	Married	Norway	Norway/Norwegian	Norway/Norwegian	1885	
Olson, Henry M.	Son	M	26	Single	New York	Norway/Norwegian	Norway/Norwegian		Life Saver, U.S. Coast Guard
Dison, John B.	Son	M	23	Single	Wisconsin	Norway/Norwegian	Norway/Norwegian		Farm Laborer
Olson, Sarah K.	Daughter	F	21	Single	Wisconsin	Norway/Norwegian	Norway/Norwegian		Public School Teacher
Olson, Carrie A.	Daughter	F	17	Single	Wisconsin	Norway/Norwegian	Norway/Norwegian		
Olson, Arthur	Son	M	15	Single	Wisconsin	Norway/Norwegian	Norway/Norwegian		

North Manitou Island Population, 1920 (continued)

Name	Relationship	Sex	Age	Marital Status	Place of Birth	Father's P.O.B. / Language	Mother's P.O.B. / Language	Year of Immigration	Occupation
Stormer, Peter Jr.	Head	M	27	Married	Michigan	Michigan	Michigan		Lumber Mill Laborer
Stormer, Maud H.	Wife	F	25	Married	Michigan	Norway/Norwegian	Norway/Norwegian		
Anderson, John O.	Head	M	59	Married	Norway	Norway/Norwegian	Norway/Norwegian	1879	Farm Laborer
Anderson, Eldri	Wife	F	45	Married	Norway	Norway/Norwegian	Norway/Norwegian	1889	
Anderson, Martin	Son	M	23	Single	Michigan	Norway/Norwegian	Norway/Norwegian		Life Saver, U.S. Coast Guard
Anderson, George H.	Son	M	21	Single	Michigan	Norway/Norwegian	Norway/Norwegian		Life Saver, U.S. Coast Guard
Anderson, Eleanor J.	Daughter	F	18	Single	Michigan	Norway/Norwegian	Norway/Norwegian		Servant, Private Family
Anderson, Arthur L.	Son	M	16	Single	Michigan	Norway/Norwegian	Norway/Norwegian		Hired Farm Laborer
Anderson, Hans J.	Son	M	11		Michigan	Norway/Norwegian	Norway/Norwegian		
Anderson, Gertrude D.	Daughter	F	10		Michigan	Norway/Norwegian	Norway/Norwegian		
Anderson, Gladys C.	Daughter	F	8		Michigan	Norway/Norwegian	Norway/Norwegian		
Anderson, Margret A.	Daughter	F	5		Michigan	Norway/Norwegian	Norway/Norwegian		
Anderson, Mable I.	Daughter	F	3		Michigan	Norway/Norwegian	Norway/Norwegian		
Weaver, Harrison	Head	M	64	Married	Michigan	Michigan	Michigan		Hired Farm Manager
Weaver, Mary Jane	Wife	F	59	Married	England	England/English	England/English	1879	Postmistress, U.S. Post Office
Grosvenor, George T.	Head	M	26	Married	Michigan	Michigan	Michigan		Mail Carrier, U.S. Mail Service
Grosvenor, Della B.	Wife	F	24	Married	Michigan	Michigan	Norway/Norwegian		
Grosvenor, Shirley M.	Daughter	F	3 mos.		Michigan	Michigan	Michigan		
Maleski, Paul	Head	M	36	Married	Michigan	German Poland	German Poland/Polish		Farm Laborer
Maleski, Josephine	Wife	F	23	Married	Michigan	Michigan	Michigan		
Maleski, Helen	Daughter	F	4		Michigan	Michigan	Michigan		
Maleski, Chester	Son	M	2		Michigan	Michigan	Michigan		
Maleski, Adam	Father	M	69	Married	German Poland	German Poland	German Poland/Polish	1868	
Maleski, Mary	Mother	F	69	Married	German Poland	German Poland	German Poland/Polish	1872	

Tending	а	Comfortable	Wildernes

Appendix E

Federal Census of Agriculture North Manitou Island, 1860-1870

TABLE E-1

Federal Census of Agriculture North Manitou Island

1860

Name	Improved Land (acres)	Unimproved Land(acres)	Value of Fa r m	Horses	Asses and Mules	Milch Cows	Working Oxen	Other Cattle	Sheep	Swine
Bedford, Thomas	60	140	500	4	0	6	2	7	-	12
Campbell, Carson	60	10	600	8	0	8	0	8	-	3
Pickard, Nicholas	200	200	8000	6	0	9	24	20	40	5
	Value of Livestock	Wheat (bu.)	Rye (bu.)	Corn(bu.)	Oats (bu.)	Wool(lbs.)	Potatoes (bu.)	Butter (lbs.)	Value of Animals	Slaughtere
Bedford, Thomas	450	-	-	_	80		30	160	80	
Campbell, Carson	800	-	-	-	60		100	300	20	
Pickard Nicholas	1661	200	_	200	1800	60	800	300	80	

TABLE E-2

Federal Census of Agriculture North Manitou Island

1870

Name	Improved Land(acres)	Woodland (acres)	Other Unimproved (acres)	Value of Farm Implements	Value of Farm	Wages Paid	Horses	Mules and Asses
Boyle, Edward	40	40	-	160	-		-	
Brown, John	20	40	-	200	-	-	-	
Mcauly, Owen	18	22.	-	200	-	•	_	_
Mcauly, Owen Jr.	15	145	_	200		-		-
Boyle, Daniel	25	135	-	300	-	-		-
Hardwick, Henry	20	140	-	300		-	-	
Campbell, Orson	30	130	-	500	-		2	
McDonough, Lesta	20	140	-	300		-	•	
Gallagher, Morrie	30	130	-	400	-	_	-	
Martin, Jamie	40	120	•	400		_	-	-
Sullivan, John	35	125	-	400			2	
Kilty, Patric	28	132	-	400	-	-		
Donahue, Patric	25	135		350	-	-	-	
Boyle, Patric	30	130	-	300	•	-	2	-
Roddy, Andrew	25	135	-	400	-	-		-
Brown, John	40	120	-	800	-	•	•	-
Gollagher, Comeline	20	140	-	400	25	-	-	-
Gollagher, Francie	20	140	-	400	40	-	-	-
Boyle, Hugh	35	125	-	650	-	-	-	-
O' Donnel, Jamie	20	140	-	300	•	-	1	-
Gillespie, John	40	120	-	400	•	-	2	-
Conly, Philip	18	142	-	300	-	-	-	-
Butter, William	30	130	-	400	•	-	2	-
Bonar, John	25	135	-	500	50	-	4	•
Gallagher, Daniel	20	140	-	400	-	-	*	•
O' Donnel, Barney	15	145	-	300	~	-	-	-
Donahue, Timothy	20	140	-	300	-	*	-	*
O' Cafferty, Michael	20	140	-	300	-	•	•	-
Gallagher, Jamie	15	145	-	200	-	-	-	•
Boyle, Joseph	18	142	-	250	-	-	-	
Corbert, John	15	145	-	200	-	*	-	-
Gallagher, Patric	15	145	-	200	25	-	-	
O' Donnel, Charlie	20	140		250	-	•	*	•
Boyle, John	12	148		200	-	-	•	-
Buchan, Robert	20	140	-	200	-	•	-	•
O' Donnel, John	30	130	-	400	•	-	•	-
Gollagher, Philip	25	135	-	350	-	-	2	
Warner, Joseph	20	140	-	300	-	-	-	-
Burke, Michael	20	140	•	300	-	-	•	-
Boyle, Michael	30	130	<u> </u>	400	-		-	-

North Manitou Island Agriculture, 1870 (continued)

Name	Improved Land (acres)	Woodland (acres)	Other Unimproved (acres)	Value of Farm Implements	Value of Farm	Wages Paid	Horses	Mules and Asses
Gallagher, Michael	15	65	-	200		-	-	-
Gallagher, Dominick	20	60	•	200				-
Burdick, Putnam	30	8	1370	1000	75	-	-	-
Sanith, William	20	60		500	75		-	•
Armstrong, Thomas	10	150	-	300			-	-
Sheridan, Aaron	6	74	•	200	-	-	-	-
Evane, Alfred	24	136	-	600		-	-	-
Price, Thomas	16	144	-	800	-		-	-
Beck, Gustaff	12	148	-	600		-	-	-
Haas, George	15	145	-	500	50	-	-	-
Hustler, George	40	280	-	600	55		6	-
Robinson, Hugh	300	100	-	1500	•	200	2	-
Pickard, Nickolas	200	120	-	3000	200	300	8	1
Roe, Robert	75	155	420	2000	150	500	6	•

	Milch Cows	Working Oxen	Sheep	Swine	Value of All Livestock	Spring Wheat(bushels)	Rye(bushels)	Corn (bushels)
Boyle, Edward	3				120	_		_
Brown, John	2	_	5	2	125			_
Mcauly, Owen	1	_	~_	3	65			10
Mcauly, Owen Jr.	2	_		1	100			_
Boyle, Daniel	2				80	_	_	 .
Hardwick, Henry	1			_	100	_	20	_
Campbell, Orson	3		10	5	475	_		
McDonough, Lesta	2	_	Named 1, page	2	135	_	_	_
Gallagher, Morrie	3			1	175	-		_
Martin, Jamie	3		10	3	225	_	_	
Sullivan, John	2		10	2	325			_
Kilty, Patric	3	_		3	265	_		
Donahue, Patric	2	_		2	150		_	
Boyle, Patric	2	_		2	225	_		
Roddy, Andrew	2	2	5	2	250	_	-	
Brown, John	3	_		3	175	_	_	
Gollagher, Corneline	2	_	10	2	24 0	20		
Gollagher, Francie	3	_		1	195		_	
Boyle, Hugh	3		10	4	315	_	30	
O' Donnel, Jamie	1			1	200	_	·	
Gillespie, John	2	_		1	295			_
Conly, Philip	2	_		2	125	****		
Butter, William	1				200		****	
Bonar, John	4		_	3	675			****
Gallagher, Daniel	2		_	2	175	_	_	_
O' Donnel, Barney	1		_	2	125	_	_	-
Donahue, Timothy	2	_		2	135	_		_

North Manitou Island Agriculture, 1870 (continued)

Name	Milch Cows	Working Oxen	Sheep	Swine	Value of All Livestock	Spring Wheat(bushels)	Rye(bushels)	Corn (bushels)
O' Cafferty, Michael	3		_	3	200	20		_
Gallagher, Jamie	2	_	5	2	150			_
Boyle, Joseph	1	-	_	1	110			
Corbert, John	1		_	2	75	-		—
Gallagher, Patric	2			1	130			_
O' Donnel, Charlie	1			2	150	 -		
Boyle, John	1	_			75	_		
Buchan, Robert	1	_		3	80	_	<u> </u>	
O' Donnel, John	2	2			225			
Gollagher, Philip	1		_		175			
Warner, Joseph	1	2			175	_		
Burke, Michael	1	2	_		150			
Boyle, Michael	2		_	1	190	_		
Gallagher, Michael	1	_		3	125	_	<u> </u>	—
Gallagher, Dominick	2			1	195		<u>.</u>	_
Burdick, Putnam	2	2	_		225		100	
Sanith, William				-	100			
Armstrong, Thomas	2		_	4	210			
Sheridan, Aaron	3		_	3	350			100
Evane, Alfred	3	2		5	310	25	-	150
Price, Thomas	2	2	_	5	305		25	25
Beck, Gustaff	4			2	340	18	26	25
Haas, George	4	2	_	6	610	6	60	20
Hustler, George	10	4		_	1045	15	150	_
Robinson, Hugh	4,	2		7	1060		150	
Pickard, Nickolas	3	_	-	6	1230	_	125	
Roe, Robert	6	6		10	2300			

	Oats (bu.)	Barley(bu.)	Potatoes (bu.)	Butter (lbs.)	Hay (tons)	Forest Products	Value of Animals Slaughtered	Total Value of All Farm Products
Boyle, Edward	35	-	100	125	1	50	25	224
Brown, John	20		75	100	2	60	13	192
Mcauly, Owen	30	_	125	50	1	40	20	179
Mcauly, Owen Jr.		-	80	115	2	-	25	137
Boyle, Daniel	40	-	100	125	2	-	30	207
Hardwick, Henry	25	-	90	70	1	-	15	164
Campbell, Orson	125	_	150	150	4	-	40	375
McDonough, Lesta	40	_	100	125	2	-	25	194
Gallagher, Morrie	75	-	125	175	3	-	38	287
Martin, Jamie	100	-	175	190	3	-	30	327
Sullivan, John	60	-	150	125	2		40	276
Kilty, Patric	50	*	80	160	4	-	48	286
Donahue, Patric	50	•	60	125	2	-	20	181

North Manitou Island Agriculture, 1870 (continued)

Name	Oats (bu.)	Barley (bu.)	Potatoes (bu.)	Butter (lbs.)	Hay(tons)	Forest Products	Value of Animals Slaughtered	Total Value of All Farm Products
Boyle, Patric	50	_	100	150	2	50	13	270
Roddy, Andrew	40	-	60	140	1	75	18	214
Brown, John	25		80	175	1	40	25	247
Gollagher, Corneline		•	125	125	3	60	15	269
Gollagher, Francie	40	_	100	175	f	100	13	288
Boyle, Hugh		-	50	190	1	75	48	325
O' Donnel, Jamie	50		75	75	2		25	154
Gillespie, John			80	125		100	40	246
Conly, Philip	30		140	140	4	-	13	244
Butter, William		-	70	50	1	-	15	81
Bonar, John	50		40	200	1	50	25	251
Gallagher, Daniel	40		80	125	1	-	13	137
O' Donnel, Barney			130	60	2	-	-	123
Donahue, Timothy	60	_	60	100	1	-	18	139
O' Cafferty, Michael	35		100	175	1	-	•	171
Gallagher, Jamie	30		50	150		**	13	106
Boyle, Joseph	25		80	70	1	•	-	105
Corbert, John			60	50	1		10	91
Gallagher, Patric	50		100	100	2	60		210
O' Donnel, Charlie			125	80	3	-	_	162
Boyle, John	45		75	50	4	-	25	105
Buchan, Robert	30		60	70	3	50		200
O' Donnel, John	60		40	125	2	60	30	267
Gollagher, Philip	48	_	85	50	1	40	-	173
Warner, Joseph		•	150	50	1	-	12	130
Burke, Michael	56		50	40	1	_	-	94
Boyle, Michael	30		100	100	3	50	_	251
Gallagher, Michael	40		75	60	1	-	25	127
Gallagher, Dominick	35		60	125	2	-	13	155
Burdick, Putnam	00	_	300	200	10		90	425
Sanith, William	150		50		*		30	155
Armstrong, Thomas	130		100	150		30	25	147
Sheridan, Aaron		_	200	200		-	65	315
Evane, Alfred	8		400	120	3	50	138	645
Price, Thomas	d		200	250	2	45	15	322
Beck, Gustaff	10		100	300	1	- T-J	44	335
	15		300	150		100	195	566
Haas, George	10	-	300	150	6	150	525	1139
Hustler, George	10	•	250	300	90	1200	323	3250
Robinson, Hugh	200	•	200	225	50	1200	100	3250 1445
Pickard, Nickolas	200	•			30 30	4000		
Roe, Robert	400		1000	500	50	4000	450	5880

Appendix F

Census of Michigan, 1894
Tenure, area and Value of Farms, Number of Rods of
Ditches, Cost of Fertilizers and Labor, and Value of
Farm Products, North & South Manitou Islands

Farms Classified According to Tenure.
Cultivated by Owners:
Rented for money rental:1
Rented for shares of products:
Total:
Land in Farms (acres).
Improved.
Tilled, including fallow and grass in rotation (whether pasture or meadow):713
Permanent meadows, permanent pastures, orchards, vineyards, nurseries
and market gardens:
Unimproved,
Woodland and forest
Other improved:
Total:
[Average farm size: 253.65 acres; Average for Maniton County: 139.51] Ditches. Open:
Tile
Farm Valuations (dollars).
Farms, including land, fences and buildings:
Farming implements and machinery:
Live stock:
Cost of Fertilizers purchased in year ending June 1, 1894:
Labor (dollar values).
Amount paid for wages for outdoor farm labor during 1893, including value of board:
Amount paid for wages for indoor farm and dairy labor during 1893,
including value of board
Estimated value of all farm productions of 1893 (sold, consumed, or on hand): . 8,320

¹Note average farm size for North Manitou Island: 253.5 acres; average farm size for Manitou County: 139.51 acres.

Appendix G

Farmstead Characteristics of North Manitou Island's Homestead Claimants

Table G-1
Farmstead Characteristics of Homestead Claimants
North Manitou Island

Claimant	Pertinent Dates (a) filing; (b) initial settlement; (c) patent acquired	Location of Claim	Total Land Area (acres)	Total Land Area Cleared (acres)	Dwelling Materials and Features (construction)
Lars Christian Alstrom	(a) 12/19/1884 (b) 04/01/1885 (c) 10/03/1890	E1/2, SW1/4 & W1/2, SE1/4, Sec. 21, T31N, R14W	160	6	log
Andrew Anderson	(a) 09/06/1875 (b) 03/01/1876 (c) 10/10/1882	Lot 3, Sec. 20; SW1/3, NW1/4 & W1/2, SW1/4, Sec. 21; Lot 1, Sec. 28, T31N, R14W	159.40	10,5 under cultivation	log
John A. Anderson	(a) 04/22/1890 (b) 05/06/1890 (c) 05/29/1896	W1/2, NW1/4; W1/2, SW1/4, Sec. 22, T31N, R14W	160	10	frame
Fredric M. Benham	(a) 06/04/1881 (b) 12/1881 (c) 06/06/1890	N1/2, NW1/4; SE1/4, NW1/4 & NE1/4, SW1/4, Sec. 33, T32N, R14W	160	12	lumber
Alvar L. Bournique	(a) 07/03/1903 (b) 10/25/1903 (c) 04/30/1909	E1/2, NW1/4; NE1/4, SW1/4 & Lot #5, Sec. 22, T31N, R14W	152.20	33	two houses
Nicholas Feilen	(a) 08/28/1903 (b) 02/15/1904 (c) 09/22/1909 (filed on 10/08/1909)	E1/2, SE1/4, Scc. 21; Lot 1, Scc. 27; Lot 4, Scc. 28, T31N, R14W	140.20	5 under cultivation	frame
John Maleske [sic]	(a) 05/16/1912 (b) 06/10/1912 (c) 05/18/1918	SW1/4, SE1/4 & Lot 1, Scc. 21, T32N, R14W	96.36	13	frame
Peter Hansen	(a) 10/04/1886 (b) 03/29/1887 (c) 05/28/1895	E1/2, NW1/4, Sec. 21, T31N, R14W	80	8	log

Farmstead Characteristics of Homestead Claimants, North Manitou Island (continued)

Claimant	Pertinent Dates (a) filing; (b) initial settlement; (c) patent acquired	Location of Claim	Total Land Area (acres)	Total Land Area Cleared (acres)	Dwelling Materials and Features (construction)
Mary Olson Swan Gustaf Olson Swan (deceased)	(a) 10/22/1878 (b) 04/1879 (c) 04/01/1886	NE1/4, Sec. 21, T31N, R14W	160	6	board
Claimant	Dwelling Size (dimensions, architectural features)	Additional Structures	Crops Grown	Livestock	
Lars Christian Alstrom	14' X 21'	frame barn, 20' x 30'	potatocs, corn, ryc, oats, turnips	4 cows, 2 calves, 2 horses, 2 pigs, 2 sheep	
Andrew Anderson	17' x 24'	frame barn, 20' x 37'	-	_	
John A. Anderson		frame barn		_	
Fredric M. Benham	18' x 18' 1 window, 1 door; 14' x 24' 5 windows, 2 doors, 1-1/2 story	12 acres fenced	500 fruit trees and vines potatoes hay	2 horses 3 heifers at Bay Spring	
Alvar L. Bournique		barn, implement shed, chicken coop, laundry, ice house	fruit trees	_	<u>.</u>
Nicholas Feilen	1-1/2 story, 12' x 21', 2 doors, 7 windows	stable on posts 12' x 20', well, pig pen, chicken house, 5 acres fenced	oats, potatoes, corn, rye, 10 apple trees	_	
John Malcske [sic]	1-1/2 story, 3 rooms	barn frame 20' x 30' on posts, hen house, wire fence	beans, hay, corn, potatoes		
Peter Hansen	14' x 16'	frame barn 16' x 16', well, fences	M 1000		
Mary Olson Swan Gustaf Olson Swan (deceased)	16' x 32', 6 windows, 4 doors	board barn 20' x 34'			

Tending a	Comfortable	Wilderness
-----------	-------------	------------

Appendix H

Manitou Island Association Pecuniary Data,
1925-1929

TABLE H-1 Manitou Island Association Income Directly Attributable to Sales of Commodities and Services, 1925-1929.

MIA Account	1925	1926	1927	1928	1929	Total(s)
Farm ¹	2069.83	5681.35	581.52	1082.15	464.90	9879.75
Dairy	546.38	283.25	234.85	361.13	359.82	1785.43
Hog	84.24	0	0	0	0	84.24
Cherry Orchard	1773.46	2237.69	2918.08	1611.49	3673.64	1221436
Apple Orchard	115.38	654.35	643.97	118.35	20.00	1552.05
Sugar Bush ²	233.01	195.42	0	15.00	3.00	446.43
Fish ³	1072.97	1421.97	176.53	0	0	2671.47
Wood	961.95	1385.57	1033.50	891.18	978.50	5250.70
Ice⁴	84.60	1.50	64.00	111.30	75.30	336.70
Road	0	θ	0	0	529.605	529.60
Tow Boat	45.00					45.00
TOTAL (\$)	6986.82	11861.10	565245	4190.6	6104.76	34795.73

Source: Manitou Island Association Farm Account Book, September 1924 - December 1929. Sleeping Bear Dunes National Lakeshore, Empire, Michigan.

TABLE H-2 Manitou Island Association Annual Expenditures for Labor, 1925-1929.

MIA Account	1925	1926	1927	1928	1929	Total (\$)
Farm	5586.74	5773.75	5799.69	5901.89	6398.25	29460.32
Cherry Orchard	392.11	1042.38	1556.99	2294.74	1772.88	7059.10
Apple Orchard	1439.36	1550.85	700.70	1793.25	1702.42	7186.58
Orchards	0	0	81.00	171.00	0	252.00
Sugar Bush	175.20	219.90	0	24.00	12.25	431.35
Fish	82.00	537.35	7.20	0	0	626.55
Wood	592.00	855.90	897.82	416.90	599.71	336233
Ice	0	207.40	168.20	136.80	189.30	701.70
Mill/Shingle Mill	0	0	2191.88	600.90	9.00	2801.78
Road	7.50	312.75	141.20	41.50	21.00	523.95
Dock	0	0	1199.20	75.00	1044.40	2318.60
Barn	0	0	0	1190.65	0	1190.65
Tow Boat	20.70	0	0	0	0	20.70
Store	18.00	0	303.60	0	22.00	343.60
TOTAL (\$)	8313.61	10500.28	13047.48	12646.63	11771.21	56279.21

SOURCE: Manitou Island Association Farm Account Book, September 1924 - December 1929. Sleeping Bear Dunes National Lakeshore, Empire, Michigan.

¹ Farm income came from the sale of cattle, beef, pork and potatoes, and rental of pasture land, farm labor and draft animals.

² There was no sugar bush account in 1927.

³ There was no fish account in 1928 and 1929.

⁴ No ice account in 1925.

⁵ This is referred to as "money back;" perhaps reimbursement from the county?

⁶ Payroll data for the month of November, 1929, are missing.

Table H-3
Manitou Island Association
Monthly Expenditures for Labor, 1925-1929.

MIA Account	Month Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul	Aug.	Sept.	Oct.	Nov. ⁷	Dec.	TOTAL
							J	~~~~					TOME.
Farm	1957.16	2144.31	1883.02	2312.12	2574.29	2644.67	2997.89	3849.66	2289.67	2871.24	1888.42	2047.87	29460.32
Cherry Orchard	45.00	0	190.26	526.08	612.03	666.06	395.00	4356.95	112.62	0	155.10	0	7059.1 0
Apple Orchard	45.00	0	97.50	166.24	1212.98	743.16	469.90	837.79	1609.88	1673.28	225.30	105.55	7186.58
Orchard ⁸	12.00	0	102.00	138.00	0	0	0	0	0	0	0	0	252,00
Sugar Bush ⁹	0	36.30	216.55	178.50	0	0	0	0	0	0	0	0	431.35
Fish ¹⁰	0	0	0	0	11.20	43.65	0	0	3.00	10.50	558.20	0	626.55
Wood	262.45	600.85	640.90	262.80	19.50	22.00	0	37.25	47.40	91.17	294.90	1083.11	3362.33
Ice ¹¹	396.60	247.20	0	0	0	0	0	0	0	0	0	57.90	701.70
Mill ¹²	61.20	228.00	0	335.40	383.60	387.50	472.38	183.50	379.50	347.70	23.00	0	2801.78
Road	21.00	0	0	7.50	0	0	20.50	0	302.85	125.10	26.00	21.00	523.95
Dock ¹³	75.00	143.00	345.10	0	103.30	723.80	667.10	186.30	0	0	0	75.00	2318.60
Barn ¹⁴	0	0	0	64.80	244.00	662.65	114.00	69.20	0	36.00	0	0	1190.65
Tow Boat	0	0	0	20.70	0	0	0	0	0	0	0	0	20.70
Store	0	0	0	83.70	22.00	67.50	0	116.40	0	36.00	0	18.00	343.60

Source: Manitou Island Association Farm Account Book, September 1924 - December 1929. Sleeping Bear Dunes National Lakeshore, Empire, Michigan.

⁷ Payroll data for the month of November, 1929, are missing.

⁸ A general "orchard" account used during the winter and early springs seasons of 1927 and 1928 only.

⁹ There was no sugar bush account in 1927.

¹⁰ There was no fish account in 1928 and 1929.

¹¹ No ice account in 1925.

¹² No mill account in 1925 and 1926. Most of the wages charged to the mill account acrued during 1927, when the mill appears to have been dile only during the months of March and December.

¹³ No dock account in 1925 or 1926.

¹⁴ This is a payroll item during 1928 only.

Table H-4 Persons Listed in the Manitou Island Association's Monthly Payrolls, 1925-1929.

Primary Work Crew	1925	1926	1927	1928	1929
Anderson, Albert	•		•	•	•
Anderson, Henry		<u> </u>	•		
Anderson, John	•	•	•		
Anderson, Martin		•			
Craker, Clifford				•	•
Firestone, Eli				•	•
Firestone, Melvin					•
Flees, Joseph				•	Ĺ
Grosvenor, Tracy	•	•	•	•	•
Kinnucan, John L., Sr.	•	•	•	•	•
Leo, Wm.			•		
Maleski, John	•	•	•	•	
Miller, Archie					•
Nelson, Alden				•	
Oien, Peter	•	•	•	•	•
Smith, Jessie	•	•	•	•	•
Itinerant and Seasonal Workers	1925	1926	1927	1928	1929
					
Anderson, Abraham			1		
Anderson, Albert	+	·			
Anderson, Alfred			-	T	
Anderson, Arthur Anderson, Hans	1				
	<u> </u>				
					k.
	<u> </u>	-			
Anderson, Gladys	1	•			
Anderson, Gladys Anderson, Geo.		•	•		
Anderson, Gladys Anderson, Geo Anderson, Martin			•		
Anderson, Gladys Anderson, Geo. Anderson, Martin Anderson, Mrs. Abc					
Anderson, Gladys Anderson, Geo Anderson, Martin Anderson, Mrs. Abe Anderson, Mrs. Henry					
Anderson, Gladys Anderson, Geo. Anderson, Martin Anderson, Mrs. Abe Anderson, Mrs. Henry Anderson, Mrs. John					
Anderson, Gladys Anderson, Geo. Anderson, Martin Anderson, Mrs. Abe Anderson, Mrs. Henry Anderson, Mrs. John Anderson, Mrs. Martin					
Anderson, Gladys Anderson, Geo. Anderson, Martin Anderson, Mrs. Abe Anderson, Mrs. Henry Anderson, Mrs. John Anderson, Mrs. Martin Andrews, Mitchel				•	
Anderson, Gladys Anderson, Geo. Anderson, Martin Anderson, Mrs. Abe Anderson, Mrs. Henry Anderson, Mrs. John Anderson, Mrs. Martin Andrews, Mitchel Basch, Sherwood					
Anderson, Henry Anderson, Gladys Anderson, Geo. Anderson, Martin Anderson, Mrs. Abe Anderson, Mrs. Henry Anderson, Mrs. John Anderson, Mrs. Martin Andrews, Mitchel Basch, Sherwood Bromwell, Mrs. Busch Chadio					
Anderson, Gladys Anderson, Geo. Anderson, Martin Anderson, Mrs. Abe Anderson, Mrs. Henry Anderson, Mrs. John Anderson, Mrs. Martin Andrews, Mitchel Basch, Sherwood Bromwell, Mrs. Busch, Charlie					
Anderson, Gladys Anderson, Geo. Anderson, Martin Anderson, Mrs. Abe Anderson, Mrs. Henry Anderson, Mrs. John Anderson, Mrs. Martin Andrews, Mitchel Basch, Sherwood Bromwell, Mrs. Busch, Charlie Carlson, Clarence					
Anderson, Gladys Anderson, Geo. Anderson, Martin Anderson, Mrs. Abe Anderson, Mrs. Henry Anderson, Mrs. John Anderson, Mrs. Martin Andrews, Mitchel Basch, Sherwood Bromwell, Mrs. Busch, Charlie Carlson, Clarence Carlson, Gertrude					
Anderson, Gladys Anderson, Geo. Anderson, Martin Anderson, Mrs. Abe Anderson, Mrs. Henry Anderson, Mrs. John Anderson, Mrs. Martin Andrews, Mitchel Basch, Sherwood Bromwell, Mrs. Busch, Charlie Carlson, Clarence Carlson, Gertrude Cooper, Jack					
Anderson, Gladys Anderson, Geo. Anderson, Martin Anderson, Mrs. Abe Anderson, Mrs. Henry Anderson, Mrs. John Anderson, Mrs. Martin Andrews, Mitchel Basch, Sherwood Bromwell, Mrs. Busch, Charlie Carlson, Clarence Carlson, Gertrude Cooper, Jack Couturier, Leon					
Anderson, Gladys Anderson, Geo. Anderson, Martin Anderson, Mrs. Abe Anderson, Mrs. Henry Anderson, Mrs. John Anderson, Mrs. Martin Andrews, Mitchel Basch, Sherwood Bromwell, Mrs. Busch, Charlie Carlson, Clarence Carlson, Gertrude Cooper, Jack Couturier, Leon Craker, Julia					
Anderson, Gladys Anderson, Geo. Anderson, Martin Anderson, Mrs. Abe Anderson, Mrs. Henry Anderson, Mrs. John Anderson, Mrs. Martin Andrews, Mitchel Basch, Sherwood Bromwell, Mrs. Busch, Charlie Carlson, Clarence Carlson, Gertrude Cooper, Jack Couturier, Leon					

^{*} Members of 1928 barn building crew.

Persons Listed in the Manitou Island Association's Monthly Payrolls, 1925-1929 (continued)

tinerant and	1925	1926	1927	1928	1929
Scasonal Workers	<u> </u>				
Duane, Ted				•	
Firestone, Gertrude	<u> </u>	•			
Firestone, Melvin		•		•	
Fisher, Edwin					•
Flees, Mr. James		ė.			
Flees, Joe					•
Flees, Joseph, Jr.				•	
Flees, Mrs. (?)				•	
Francie, Ed					•
Furst, Burton		•	•		
Furst, Leslic		•	•		
Furst, Norman	•				
Garthe, Carl			•		
Garthe, Carlton			•		
Gingaway, Nicholas	1				•
Grant, Oscar			•	•	•
Hacft, Martin		•	•		
Hahn, John	•				
Halseth, Anna		•	•	•	•
Halsted, Louis		•	•	•	•
Halsted, Oscar			•		
Kelenske, Mrs. Peter		•			
King, John*				•	
Kingbird, Tom					•
Kinnucan, Della					•
Kinnucan, Donald		•	•	•	•
Kinnucan, John L., Jr.		•	•	•	•
Kinnucan, Marguerite					•
Kinnucan, Rex			-	-	•
Knopp, Herman			•		
Kurtzhals, Fred			•	•	
Leabo, Lewis			•		
Lco, Will		-		•	•
Leois, Hazel			-		•
Looze, John	1		•		
Maleski, Chester					•
Maleski, Helen				-	
Maleski, Paul					
Maleski, Raymond	-				- -
Maleski, Mrs. (?)	-				
Maleski, Mrs. John					_
			- 		
Maleski, Mrs. Paul	!	1			

^{*} Members of 1928 barn building crew.

Persons Listed in the Manitou Island Association's Monthly Payrolls, 1925-1929 (continued)

Itinerant and Seasonal Workers Miller, Joe Mosier, Louis Mosier, Mrs. L[ouis]? Nanego, Wm. Nelson, Alden Nelson, Melvin Oien, Chrest (?) Oien, Mrs. Peter Olsen, Sarah Olson, Mrs. (?) Paetschow, Andrew Paukett, Theodore Peditt, John	925	1926	1927	1928	1929
Mosier, Louis Mosier, Mrs. L[ouis]? Nanego, Wm. Nelson, Alden Nelson, Melvin Oien, Chrest (?) Oien, Mrs. Peter Olsen, Sarah Olson, Mrs. (?) Paetschow, Andrew Paukett, Theodore					
Mosier, Louis Mosier, Mrs. L[ouis]? Nanego, Wm. Nelson, Alden Nelson, Melvin Oien, Chrest (?) Oien, Mrs. Peter Olsen, Sarah Olson, Mrs. (?) Paetschow, Andrew Paukett, Theodore					
Nanego, Wm. Nelson, Alden Nelson, Melvin Oien, Chrest (?) Oien, Mrs. Peter Olsen, Sarah Olson, Mrs. (?) Paetschow, Andrew Paukett, Theodore					
Nanego, Wm. Nelson, Alden Nelson, Melvin Oien, Chrest (?) Oien, Mrs. Peter Olsen, Sarah Olson, Mrs. (?) Paetschow, Andrew Paukett, Theodore				•	
Nelson, Alden Nelson, Melvin Oien, Chrest (?) Oien, Mrs. Peter Olsen, Sarah Olson, Mrs. (?) Paetschow, Andrew Paukett, Theodore					
Nelson, Melvin Oien, Chrest (?) Oien, Mrs. Peter Olsen, Sarah Olson, Mrs. (?) Paetschow, Andrew Paukett, Theodore					
Oien, Mrs. Peter Olsen, Sarah Olson, Mrs. (?) Paetschow, Andrew Paukett, Theodore					
Olsen, Sarah Olson, Mrs. (?) Paetschow, Andrew Paukett, Theodore					
Olsen, Sarah Olson, Mrs. (?) Paetschow, Andrew Paukett, Theodore					
Paetschow, Andrew Paukett, Theodore		•			1
Paukett, Theodore	•				
Paukett, Theodore	•		[•
Peditt, John			i		
					•
Pelby, Dorman (?)	i				•
Persik, Martha			•		
Perrish, Martha		•			ļ
Peshaba, Edw					•
Peshaby, Ben			-		•
Petadows (?), Joc			í		•
Poholski, Mike*				•	
Polwadin, Joe					•
Popa, Paul*				•	
Popa, Steve				•	
Rotta, Mike		•			
Secore, Joe					•
Shauger, Geo.		•	l i		
Shauger, Katherine		•		Ī	
Shauger, Mrs. (?)		•			
Sheffern, Clemmence				•	
Shocko, Andrew					•
Skeba, Steve	•	•			
Simon, Frank					•
Smith, David					•
Smith, Ella			1		•
Smith, James					•
Smith, John	,				•
Smith, Marvin			[i	•
Smith, Mr					•
Smith, Mrs. C. (?)		•	i		
Smith, Mrs. Jessie		•	······································	•	
Stanislauski, Barncy				•	
Strohm, Wm.			•		
Washegisck (?), Joc	 				•

^{* =} members of 1928 barn building crew

Persons Listed in the Manitou Island Association's Monthly Payrolls, 1925-1929 (continued)

Itinerant and Seasonal Workers	1925	1926	1927	1928	1929
Washigisk, David					-
Weathers, M.*				•	
Wojinak, Rog.					•
Wojniak, Robert					•
Yonet, Silas		į	i	i.	

* Members of 1928 barn building crew.

Source: Manitou Island Association Farm Account Book, September 1924 - December 1929. Sleeping Bear Dunes National Lakeshore, Empire, Michigan.

Table H-5
Manitou Island Association Cherry Harvest Crews, 1927-1929¹⁵

Name.	1927	1928	1929	1920 Census Data
Alford, John	•			
Anderson, Arthur			•	
Anderson, Ethel		•		
Anderson, Gertrude [D.]	•			10, daughter of John and Eldri Anderson
Anderson, Gladys [C.]	•	•	•	
Anderson, Mable	•	•	•	
Anderson, Martin			•	23, son of John and Eldri Anderson, lifesaver, U.S. Coast Guard
Anderson, Marguerite	•	•		
Anderson, Mrs. Abr. [Anna L.]	•	•		47, no occupation
Anderson, Mrs. Albert	•	•		
Anderson, Mrs. Gco.	•			
Anderson, Mrs. Henry	•			
Anderson, Mrs. John [Eldri]	•			45, no occupation
Bellanger, Rosella			•	
Bromwell, Mrs.			•	
Budding, Mrs.	•			
Budling, E.		•		
Bukiel, Anna			•	
Conk, C. W.	•			
Craker, Carrie		•	•	
Craker, Julia			•	
Craker, Mrs.			•	
Dembrock, Genevieve	•		•	
Dennis, Marie	•	•		
Eblacker, Erma			•	
Firestone, Melvin	•	•	•	
Firestone, Mrs.			•	
Flccs, Mrs. J.		•		

¹⁵ For 1927-1929, the MIA account book lists cherry pickers and other seasonal employees separately.

Manitou Island Association Cherry harvest Crews, 1927-1929 (continued)

Name	1927	1928	1929	1920 Census Data
Furst, Harold	•			
Furst, Leslie	•	- 		
Garth, Mrs.		•		
Gilbert, Mrs. M		•		
Grant, Mrs. O.			•	
Grant, Oscar		•		
Grosvenor, Mrs. T.	•			
Grosvenor, Shirley [M.]			•	3 mos., daughter of George and Della
Guldberg, Mrs.		•		
Falseth, Anna	•	•	•	15, half sister of Hans, no occupation
Halsted, Gertrude		•		
leimel, Chester	•			
ohnson, Lezh			•	
Kelenski, Donna		•	•	
Kelenski, Dorothy			•	[Kelenske], 24, boarder with Peter Stormer, Sr.
Kelenski, Mrs.			•	
Kelenski, Peter		•		
Cinnucan, Della	•		•	
Cinnucan, Donald	•			
Cinnucan, John, Jr.	•	•		
Ginnucan, Rex	•	•	•	
Cinnucan, Vera	•	•	•	
Cunold, Martha			•	
eo, Bernie		•	•	
eo, Marcello		•	•	
ong, Margaret			•	
Long, Wm.		•		
M (?), Margarct	•			
Maleski, Alice		•		
Maleski, Chester	•	•	•	2, son of Paul and Josephine
Maleski, Gertrud[e]	•	•		5, daughter of John and Anna
Maleski, Helen	•	•	•	4, daughter of Paul and Josephine
Maleski, John		•		34, farm labor
Maleski, Paul	•		•	36, farm labor
Maleski, Raymond	•	•		3, son of John and Anna
McCarthy, Agnes		•		
McManon, J. L.	•	;		
Miller, Archic		į	•	
Mosier, Bernie			•	(Bernice), 1 mo., daughter of Louis and Carrie Mosics
Mosier, Mary Louise			•	
Mosier, Mrs. L.	•	•		[Carrie F.], 21, no occupation
Nelson, Alden	•			11, nephew of Hans Halseth
Nelson, Melvin		•	•	
Nelson, Mrs.	1	1	•	

Manitou Island Association Cherry harvest Crews, 1927-1929

(continued)

Name	1927	1928	1929	1920 Census Data
Nelson, Wilma	•	•	•	
Oien, Mrs.			•	
Olson, Sarah	•			[Sarah K.], 21, daughter of Charles and Segoid
Orga (?), Mrs.		•		
Peditt, John			•	
Persik, Martha	•			
Pctroskey, Joseph			•	
Petroskey, Margaret			•	
Popa, Eddic		•		
Popa, John			•	
Popa, Tillie			•	
Reed, Robert	•			
Ruff, Gordon	÷			
Ruff, Howard	•			
Schellak, Elizabeth	•			
Skeba, Alice	•	•		
Smedley, Charlie	•			
Smedley, L. (Lyle)	•	•		
Smedley, Mrs.	•			
Smith, David			•	
Smith, James			•	
Smith, Marion	•			
Smith, Marvin			•	
Smith, Mrs.			•	
Smith, Mrs. Jessic	•	•		
Smith, Nellic	•			
Swenson, Mrs.			•	
Tucker, James			•	
Weiner, Beulah			•	
Woziniak, Agnes			•	
Woziniak, Mrs.				
Zywicki, Frank		•		

SOURCE: Manitou Island Association Farm Account Book, September 1924 - December 1929. Sleeping Bear Dunes National Lakeshore, Empire, Michigan.

Bibliography

ABBREVIATIONS FOR BIBLIOGRAPHIC REFERENCES &FIGURE SOURCES

CMS-JN Chicago Maritime Society, John Newhall

Collection

LHM Leelanau Historical Museum Archives and

Local History Center

LHM-BK Betty Kramer Collection, Leelanau Historical

Museum Archives and Local History Center

NPS National Park Service

SBD-AF Angell Foundation Collection, Sleeping Bear

Dunes National Lakeshore, Sleeping Bear

Dunes National Lakeshore

SBD-MIA Manitou Island Association Collection,

Sleeping Bear Dunes National Lakeshore

SBDNL Sleeping Bear Dunes National Lakeshore

ARCHIVES AND SPECIAL COLLECTIONS

Bentley Historical Library, Ann Arbor, Michigan.

Chicago Maritime Society, Chicago, Illinois.

Leelanau Historical Museum Archives and Local History Center, Leland, Michigan.

National Archives and Records Administration, Washington, D. C.

Sleeping Bear Dunes National Lakeshore, Empire, Michigan.

State Archives of Michigan, Lansing, Michigan.

State Historical Society of Wisconsin, Madison, Wisconsin.

Interviews

Denice Lucas

Jean Lundquist

Paul Maleski, Jr.

Rita Hadra Rusco

LAWS, PUBLIC ACTS AND STATUTES

National Historic Preservation Act of 1966. U.S. Code. Vol. 4, title 16, sec. 470 (1970).

National Park Service. U.S. Code. Vol. 4, title 16, sec. 1 (1970).

Sleeping Bear Dunes National Lakeshore. U.S. Code. Vol. 4, title 16, sec. 460x (1982).

Wilderness Act of 1964. U.S. Code. Vol. 4, title 16, secs. 1131-1136 (1970).

GOVERNMENT DOCUMENTS AND REPORTS

Ahern, Katherine. Cultural Landscape Bibliography: An Annotated Bibliography on Resources in the National Park System. Ed. Leslie H. Blythe and Robert R. Page. Washington, D.C.: U.S. Department of the Interior, National Park Service, 1992.

[Bartlett, I. H.] Michigan State Department of Conservation. "A Report of Conditions among the Deer Herds of Alpena County, Michigan." Lansing: Michigan State Department of Conservation, Game Division, 13 November 1931.

- Bartlett, I. H. The North Manitou Island Deer Herd: A History and Suggested Management Plan. Lansing: Deer Investigations, Game Division, Department of Conservation, February 4, 1944.
- Birnbaum. Charles A. Preservation Briefs 36: Protecting Cultural Landscapes—Planning, Treatment and Management of Historic Landscapes. Washington, D.C.: U.S. Department of the Interior, NPS, 1994.
- Birnbaum, Charles A., ed., with Christine Capella Peters. The Secretary of the Interior's Standards for the Treatment of Historic Properties, with Guidelines for the Treatment of Cultural Landscapes. Washington, D.C.: U.S. Department of the Interior, NPS, 1996.
- Dandekar, Hemalata C., Robert M. Darvis and Eric Allen MacDonald. Structural Preservation and Adaptive Reuse of Michigan Barns. Lansing, Mich.: Michigan Department of State, 1992.
- Fritz, David L. "History Data Report on North Manitou Island, Leelanau County, Michigan." Denver: NPS, April 1987.
- Gardner, Washington, Michigan Secretary of State. Census of the State of Michigan, 1894, Volume II: Agriculture, Manufactories, Mines and Fisheries. Lansing: Robert Smith & Co., 1896.
- Gilbert/Commonwealth Inc. of Michigan. "Cultural Resource Assessment of Proposed Construction Activities South Manitou Island, Sleeping Bear Dunes National Lakeshore, Michigan." NPS, 1985.
- Proposed Rehabilitation of the Platte River Campground and Limited Testing at Site 20BZ16, Benzie County, Michigan." NPS, 1986.
- Haswell, Susan Olsen, and Arnold R. Alanen. A Garden Apart: An Agricultural and Settlement History of Michigan's Sleeping Bear Dunes National Lakeshore Region. Omaha, Nebr., and Lansing, Mich.: Midwest Regional Office, NPS, and State Historic Preservation Office, Michigan Bureau of History, 1994.
- Hazlett, Brian T., and Robert J. Vande Kopple. The Terrestrial Vegetation and Flora of North and South

- Manitou Islands, Sleeping Bear Dunes National Lakeshore, Leelanau County, Michigan. Technical Report No. 11. Douglas Lake, Mich.: University of Michigan Biological Station, 1983.
- Hoffman, Randy and Kelly Kearns, eds. Wisconsin Manual of Control Recommendations for Ecologically Invasive Plants. Madison, Wisc.: Bureau of Endangered Resources, Department of Natural Resources, 1997.
- Lovis, William A., Robert Mainfort, and Vergil E. Noble. "An Archaeological Inventory and Evaluation of the Sleeping Bear Dunes National Lakeshore, Leelanau and Benzie Counties, Michigan." NPS, 1976.
- McClelland, Linda Flint, J. Timothy Keller, Genevieve P. Keller, and Robert Z. Melnick. National Register Bulletin 30: Guidelines for Evaluating and Documenting Rural Historic Landscapes. Washington, D.C.: U.S. Department of the Interior, NPS, 1990.
- McCullough, Dale R., and David J. Case. "The White-tailed Deer of North Manitou Island, Michigan." Empire, Mich.: SBDNL, 13 August 1982.
- Melnick, Robert Z., with Daniel Sponn and Emma Jane Saxe. Cultural Landscapes: Rural Historic Districts in the National Park System. Washington, D.C.: U.S. Department of the Interior, NPS, 1984.
- Muhn, Jim. "Historic Resource Study: Sleeping Bear Dunes National Lakeshore, Michigan." Jill York O'Bright, ed. Denver: NPS, [1979] 1984.
- Richner, Jeffrey J. "Archeological Excavations at the Platte River Campground Site (20BZ16), Sleeping Bear Dunes National Lakeshore, 1987." Lincoln, Nebr.: Midwest Archeological Center, NPS, 1991.
- U.S. Department of the Interior. NPS. Our Fourth Coast: Great Lakes Shoreline Recreation Area Survey. Washington, D.C.: U.S. Department of the Interior, NPS, 1960.
- Bear Dunes National Lakeshore. Empire, Mich.: SBDNL, September 1975.

- Dunes National Lakeshore, Michigan. Denver:
 Department of the Interior, NPS, October 1979.
- ———. Wilderness Recommendation: Sleeping Bear Dunes National Lakeshore. Empire, Mich.: SBDNL, January 1981.
- ——. Development Concept Plan/Interpretive Prospectus, North Manitou Island, Sleeping Bear Dunes National Lakeshore, Michigan. Empire, Mich.: SBDNL, November 1987.
- ———. "North Manitou Island, Sleeping Bear Dunes National Lakeshore" [brochure]. Washington, D. C.: Government Printing Office, 1987.
- ——. "Public Response Report for the Draft North Manitou Island Development Concept Plan and the Draft Glen Haven development Concept Plan/Interpretive Prospectus/Environmental Assessment, Sleeping Bear Dunes National Lakeshore." Denver: NPS, September 1987.
- Management Policies: Management of the National Park System. Washington, D.C.: U.S. Department of the Interior, NPS, 1988.
- ——. NPS-77: Natural Resources Management Guideline. Washington, D.C.: U.S. Department of the Interior, NPS, 1991.
- ------. NPS-28, Cultural Resource Management Guideline, Release No. 4. Washington, D.C.: U.S. Department of the Interior, NPS, 1994.
- Weber, Herman L. Soil Survey of Leelanau County, Michigan. Washington, D. C.: U.S.D.A. Soil Conservation Service, in cooperation with the Michigan Agricultural Experiment Station, 1973.
- Williams, Brenda Wheeler, Arnold R. Alanen and William H. Tishler. Coming Through with Rye: An Historic Agricultural Landscape Study of South Manitou Island at Sleeping Bear Dunes National Lakeshore, Michigan. Omaha: Midwest Field Area, NPS, 1996.

NEWSPAPERS

Detroit News

Grand Rapids Press

Kalamazoo Gazette

Leelanau Enterprise/Enterprise-Tribune (Leland, Mich.)

Muskegon Chronicle

Traverse City Record-Eagle

ARTICLES, BOOKS, AND REPORTS

- Alanen, Arnold R., and William H. Tishler. "Farming the Lake Superior Shore: Agriculture and Horticulture on the Apostle Islands, 1840-1940." Wisconsin Magazine of History 79(3): 163-203 (Spring 1996).
- Archbold, Al. "Once upon an Island." Recreation Management 8(9): 8-10 (November 1965).
- Averill, Marie. "Fisherman Finds Contentment in Retirement from the Lake," *Leelanau Enterprise-Tribune* [?], 26 November 1970.
- Barnouw, Victor. Wisconsin Chippewa Myths & Tales and Their Relation to Chippewa Life. Madison: University of Wisconsin Press, 1977.
- Bartlett, I. H., "North Manitou Island's Deer Herd." *Michigan Conservation* (September 1944), 10.
- Brodbeck, Robert. "Dune Dreams: Northern Michigan's National Lakeshore Creates Memories that Last a Lifetime." *Michigan Living* 81(10): 16-18 (July/August 1999).
- Bryant, William Cullen. The Letters of William Cullen Bryant. Vol. 2. Ed. William Cullen Bryant II and Thomas G. Voss. New York: Fordham University Press, 1977.
- Cleland, Charles Edward. "The Prehistoric Animal Ecology and Ethnozoology of the Upper Great Lakes Region." *Anthropological* Papers No. 29, Museum of Anthropology, University of Michigan, Ann Arbor, 1966.

- ——. Rites of Conquest: The History and Culture of Michigan's Native Americans. Ann Arbor: University of Michigan Press, 1992.
- Clifton, James A., George L. Cornell, and James M. McClurken. People of the Three Fires: The Ottawa, Potawatomi and Ojibway of Michigan. Grand Rapids: Grand Rapids Inter-tribal Council, 1986.
- Charles, Gordon. "Swiss Family Manitou," Detroit News Magazine, 23 March 1980, 34-36; 38.
- Clements, Frederic E. "Plant Succession: An Analysis of the Development of Vegetation." Carnegie Inst. Washington Publ. No. 242:1-512 (1916).
- Journal of Ecology 24:252-84 (1936).
- Coulter, Samuel Monds. "An Ecological Comparison of Some Typical Swamp Areas" Annual Report, Missouri Botanical Garden 15:38-71 (1904).
- Cowles, Henry Chandler. "The Ecological Relations of the Vegetation on the Sand Dunes of Lake Michigan. *Botanical Gazette* 27: 95-117, 167-202, 281-308, 361-391 (1899).
- and Vicinity," The Botanical Gazette 31(3): 145-182 (1901).
- Cronon, William, ed. Uncommon Ground: Toward Reinventing Nature. New York: W. W. Norton.
- Dandekar, Hemalata C., and Daniel F. Schoof. "Michigan Farms and Farm Buildings: 150 Years of Transformation." *Inland Architect* 32(1): 61-67 (1988).
- Davis, Marion Morse. "A Romantic Chain of Islands." *Michigan History* 11(3): 342-379 (July 1927).
- Dickinson, Julia Terry. The Story of Leelanau. Omena, Mich.: Solle's Bookshop, 1951.
- Dorr, John A., Jr., and Donald F. Eschman. Geology of Michigan. Ann Arbor: University of Michigan Press, 1970.
- Edwards, Jay D. Louisiana's Remarkable French Vernacular Architecture, 1700-1900, Baton

- Rouge: Department of Geography & Anthropology, Louisiana State University, 1988.
- Ellis, Albert G. "Fifty-four Years' Recollections of Men and Events in Wisconsin." Report and Collections of the State Historical Society of Wisconsin 7: 232-233 (1876).
- Ellul, Jacques. The Technological Society. Trans. John Wilkinson. New York: Alfred A. Knopf, 1964.
- Fitting, James E. The Archaeology of Michigan: A Guide to the Prehistory of the Great Lakes Region.
 2nd rev. ed. Bloomfield Hills, Mich.: Cranbrook Institute of Science, 1975.
- Fuller, Margaret. Summer on the Lakes, in 1843. Urbana and Chicago: University of Illinois Press [1844] 1991.
- Furst, Glenn C. My Point of View. n.p., 1992.
- Gille, Bertrand, ed. *The History of Techniques.* 2 vols. Montreux, Switzerland: Gordon and Breach Science Publishers, 1986.
- Gillelan, G. Howard. "Bowhunter's Paradise," Outdoor Life (ca. 1966 or 1967), n.p.
- Haeckel, Ernst. The Wonders of Life: A Popular Study of Biological Philosophy. Trans. Joseph McCabe. New York, London: Harper & Brothers, 1905.
- Harrington, Steve. "North Manitou: A Step Back in Time." *Michigan Sportsman* (April 1986), 64-68.
- Hatt, Robert T., J. Van Tyne, L. C. Stuart, C. H. Pope, and A. B. Grobman. Island Life: A Study of the Land Vertebrates of the Islands of Eastern Lake Michigan. Bulletin No. 27. Bloomfield Hills, Mich.: Cranbrook Institute of Science, 1948.
- Hawkins, N[ehemiah]. The Mormon of the Little Manitou Island: An Historical Romance... by the Knight of Chillon of Switzerland and Associates. New York: Uplift Company, 1916.
- Hazlett, Brian T. "The Flora of Sleeping Bear Dunes National Lakeshore, Benzie and Leelanau Counties, Michigan." *The Michigan* Botanist 30(4): 139-207 (1991).

- Heater, Donna Elizabeth Kelenske. "Recollections." The Small Towner (Spring 1984).
- Hill, E. J. "The Southern Limit of Juniperus sabina." Plant World 3: 140 (1900).
- Hopkins, William, Nora J. Mitchell and Alice Bojanowski. "A Taste of History." Courier (December 1988): 12-14.
- Hunt, John Dixon. Gardens and the Picturesque: Studies in the History of Landscape Architecture. Cambridge, Mass.: MIT Press, 1992.
- Johnston, Basil. The Manitous: The Spiritual World of the Ojibway. New York: Harper Collins, 1995.
- Kalchik, Colleen. "Manitou: You Can Feel the Energy on Lake Michigan's Spirit Islands." Northern Express (Traverse City, Mich.), 12 July 1995, 4-5.
- Kniffen, Fred B., and Sam Bowers Hilliard.

 Louisiana, Its Land and People. rev. ed. Baton
 Rouge: Louisiana State University Press, 1988.
- Leopold, Aldo. A Sand County Almanac; with Essays on Conservation from Round River. New York: Ballantine Books, 1966.
- Lowenthal, David. The Past Is a Foreign Country. Cambridge: Cambridge University Press, 1985.
- Mackinnon, Captain Lauchlin Bellingham. Atlantic and Transatlantic Sketches. New York: Harper and Brothers, 1852.
- Mason, Ronald J. Great Lakes Archaeology. New York: Academic Press, 1981.
- McClurken, James M. Gah-Baeh-Jhagwah-Buk (The Way It Happened): A Visual Culture History of the Little Traverse Bay Bands of Odawa. East Lansing: Michigan State University Museum, 1991.
- McFarlane, Andrew. "Great Spirits: The Living History of Manitou." *The Gazette* (Elk Rapids, Mich.) 5(2): 5, 19-21 (June 24, 1994).
- McIntosh, Robert P. The Background of Ecology Concept and Theory. Cambridge: Cambridge University Press, 1985.

- Mansfield, John Brandt, ed. and comp. *History of the Great Lakes*. 2 vols. Chicago: J. H. Beers, 1899; Cleveland: Freshwater Press, 1972.
- Mumford, Lewis. Technics and Civilization. New York: Harcourt, Brace and Company, 1934.
- Noble, Allen G. Wood, Brick, and Stone: The North American Settlement Landscape. 2 vols. Amherst, Mass.: University of Massachusetts Press, 1984.
- Ogilvie, Hamish. "Michigan's 'Secret' Island, North Manitou." *Michigan Living Motor News* 60(4): 24-25 (October 1977).
- Oliver, Paul, ed. Vernacular Architecture of the World. 3 vols. Cambridge, U.K., New York: Cambridge University Press, 1997.
- Piggott, Stuart. Ruins in a Landscape: Essays in Antiquarianism. Edinburgh: University Press, 1976.
- Real, Leslie A., and James H. Brown, eds. Foundations of Ecology: Classic Papers with Commentaries. Chicago, London: University of Chicago Press in association with the Ecological Society of America, 1991.
- Roark, Michael, ed. French and Germans in the Mississippi Valley: Landscape and Cultural Traditions. Cape Girardeau, Mo.: Center for Regional History and Cultural Heritage, Southeast Missouri State University, 1988.
- Rogers, A. D., III. John Merle Coulter: Missionary in Science. Princeton, N.J.: Princeton University Press, 1944.
- Rosentreter, Roger L. "Leelanau County." Michigan History (September/October 1985): 8-11.
- Ruchhoft, R. H. Exploring North Manitou, South Manitou, High and Garden Islands of the Lake Michigan Archipelago. Cincinnati: Pucelle Press, 1991.
- Rusco, Rita Hadra. "Living on the Island." Detroit Free Press (Detroit Section), Sunday October 18, 1981, 16-18, 20-22.
- ——. North Manitou Island: Between Sunrise and Sunset. n.p.: Book Crafters, 1991.

- Sauer, Carl Ortwin, "The Morphology of Landscape." In Land and life: A Selection from the Writings of Carl Ortwin Sauer. Ed. John Leighy. Berkeley: University of California Press, 1963.
- Sellars, Richard West. Preserving Nature in the National Parks: A History. New Haven: Yale University Press, 1997.
- Shawver, John L. Plank Frame Barn Construction. New York: David Williams Company, 1904.
- Smith, Norman F. Michigan Trees Worth Knowing. Rev., 5th ed. Lansing: TwoPeninsula Press/ Michigan Department of Natural Resources, 1978.
- Smith, Theresa S. The Island of the Anishnaabeg: Thunderers and Water Monsters in the Traditional Ojibwe Life-world. Moscow, Idaho: University of Idaho Press, 1995.
- Soske, Megan E. Scenic Views: Eighteenth-century Landscapes, Ruinscapes, and Cityscapes: Selections from the Indiana University Art Collection. Bloomington, Ind.: Indiana University, 1996.
- Sprague, Elvin. The Grand Traverse Region, Historical and Descriptive. Chicago: H. R. Page & Co., 1884.
- Stone, Mark. "Sweet Isolation: The Pristine Quietude of North Manitou." *The Gazette* (Elk Rapids, Mich.) 5(2): 1, 21-23 (June 24, 1994).
- Storrer, William Allin. "What's in a Plan? The Blossom/Fiske Cottage." FLAW Update 9(1): 1-2 (June 1989).
- Tanner, Helen Hornbeck, ed. Atlas of Great Lakes Indian History. Norman, Okla.: University of Oklahoma Press, 1987.
- Terry, Dickson. The Stark Story: Stark Nurseries 150th Anniversary. Special publication of The Bulletin. St. Louis: Missouri Historical Society, 1966.
- Tobey, Ronald C. Saving the Prairies: The Life Cycle of the Founding School of American Plant Ecology, 1895-1995. Berkeley: University of California Press, 1981.

- Tuan, Yi-Fu. The Good Life. Madison, Wisc.: University of Wisconsin Press, 1986.
- Volney, C.-F. (Constantin-Francois). The Ruins; or, Meditation on the Revolutions of Empires: and The Law of Nature, . . . New York, Peter Eckler Publishing Co., 1926 [1791].
- Wagner, William. Continental!: Its Motors and Its People. Fallbrook, Calif.: Armed Forces Journal International; Aero Publishers, 1983.
- Watkin, David. The English Vision: The Picturesque in Architecture, Landscape and Garden Design. New York: Harper and Row, 1982.
- Weeks, George. Sleeping Bear: Yesterday and Tomorrow. Franklin, Mich. Altwerger and Mandel Publishing, 1990.
- Whitford, Harry Nichols. "The Genetic Development of the Forests of Northern Michigan."

 Botanical Gazette 31: 289-325 (May 1901).
- Worster, Donald. Nature's Economy: A History of Ecological Ideas. Cambridge: Cambridge University Press, 1977.
- Wright, John C. Stories of the Crooked Tree. Harbor Springs, Mich.: Lakeside Press, 1915.
- ——. The Crooked Tree: Indian Legends and a Short History of the Little Traverse Bay Region. Harbor Springs, Mich.: C. Fayette Erwin, 1917.
- Yamin, R., and K. B. Metheny, eds. Landscape Archaeology: Reading and Interpreting the American Historical Landscape. Knoxville: University of Tennessee Press, 1996.
- Yarnell, Richard Asa. "Aboriginal Relationships between Culture and Plant Life in the Upper Great Lakes Region." Anthropological Papers No. 23. Ann Arbor: Museum of Anthropology, University of Michigan, 1964.

Figure Sources

	CHAPTER 1		Tanner, ed., Atlas of Great Lakes Indian
Figure 1.0	SBDNL		History (Norman, Okla.: University of
Figures 1.1 & 1.2	Eric MacDonald and Katie Franks		Oklahoma Press, 1987).
Figure 1.3	Eric MacDonald and Katie Franks; natural	Figure 2.4	Eric MacDonald and Katie Franks; derived
	features data derived from Brian T. Hazlett		from Helen Hornbeck Tanner, ed., Atlas of
	and Robert J. Vande Kopple, The Terrestrial		Great Lakes Indian History (Norman, Okla.:
	Vegetation and Flora of North and South Manitou		University of Oklahoma Press, 1987).
	Islands, Sleeping Bear Dunes National Lakeshore,	Figure 2.5	Eric MacDonald and Katie Franks; derived
	Leelanau County, Michigan (Douglas Lake,		from Charles Edward Cleland, Rites of
	Mich.: University of Michigan Biological		Conquest: The History and Culture of Michigan's
	Station, Technical Report No. 11, 1983).		Native Americans (Ann Arbor: University of
	Chapter 2		Michigan Press, 1992), and Helen Hornbeck
Figure 2.0	Eric MacDonald		Tanner, ed., Atlas of Great Lakes Indian
Figure 2.1	Eric MacDonald and Katie Franks; derived		History (Norman, Okla.: University of
	from Herman L. Weber, Soil Survey of		Oklahoma Press, 1987).
	Leelanau County, Michigan (Washington, D.C.:	Figure 2.6	Eric MacDonald and Katie Franks
	U.S.D.A. Soil Conservation Service, in	Figure 2.7	Eric MacDonald and Katie Franks; derived
	cooperation with the Michigan Agricultural		from Orange Risdon, "Original Survey
	Experiment Station, 1973).		Notes," 1847, transcribed by Charles Kruch,
Figure 2.2	Eric MacDonald and Katie Franks; derived		1989 (on file at SBDNL).
	from Charles Edward Cleland, "The	Figures 2.8-2.13	SBDNL
	Prehistoric Animal Ecology and	Figure 2.14	Botanical Gazette 27, 1899
	Ethnozoology of the Upper Great Lakes	Figure 2.15	CMS-JN
	Region," Anthropological Papers No. 29, (Ann	Figure 2.16	SBDNL
	Arbor.: Museum of Anthropology,	Figure 2.17	SBDNL; historic photo donated by Giles
	University of Michigan, 1966).		Merritt.
Figure 2.3	Eric MacDonald and Katie Franks; derived	Figures 2.18-2.21	SBDNL
	from Charles Edward Cleland, Rites of	Figure 2.22	SBD-AF
	Conquest: The History and Culture of Michigan's	Figure 2.23	Eric MacDonald and Katic Franks; derived
	Native Americans (Ann Arbor: University of		from historic plat map in SBD-MIA.
	Michigan Press, 1992), and Helen Hombeck	Figure 2.24	SBDNL
		Figure 2.25	SBD-MIA

Figures 2.26 & 2.27	Manitou Island Association brochure, ca.	Figures 4-47-4.52	Eric MacDonald
	1960s, MIAC	~	Eric MacDonald and Katie Franks; derived
Figure 2.28	SBDNL	-	from Historic American Buildings Survey
Figure 2.29	Eric MacDonald and Katie Franks		field notebook on file at SBDNL.
Figures 2.30 & 2.31	Eric MacDonald	Figure 4.54	Eric MacDonald; derived from Jay D.
Figure 2.32	CMS-JN		Edwards, Louisiana's Remarkable French
	Chapter 3		Vernacular Architecture, 1700-1900 (Baton
Figure 3.0	SBDNL		Rouge: Department of Geography &
Figure 3.1	Eric MacDonald; derived from homestead		Anthropology, Louisiana State University,
	records held by the National Archives and		1988).
	Records Administration, Washington, D.C.	Figures 4.55-4.58	Eric MacDonald
Figure 3.2	SBDNL	Figure 4.59	Eric MacDonald and Katic Franks
Figures 3.3 & 3.4	CMS-JN	Figure 4.60	Eric MacDonald
Figure 3.5	SBDNL	Figure 4.61	Eric MacDonald and Katie Franks
Figure 3.6	CMS-JN	Figure 4.62	CMS-JN
Figure 3.7	SBDNL	Figures 4.63-4.65	Paul Maleski, Jr.
Figure 3.8	CMS-JN	Figure 4.66	Eric MacDonald and Katie Franks
Figures 3.9-3.15	SBDNL	Figures 4.67-4.70	Eric MacDonald
Figure 3.16	LHM-BK	Figures 4.71 & 4.72	CMS-JN
Figure 3.17	CMS-JN	Figure 4.73	SBDNL
Figure 3.18	SBDNL	Figure 4.74	Eric MacDonald
Figure 3.19	CMS-JN	Figures 4.75 & 4.76	Eric MacDonald and Katic Franks
	Chapter 4	Figure 4.77	Eric MacDonald
Figure 4.0	Edward Wood	Figure 4.78	Paul Maleski, Jr.
Figure 4.1	Eric MacDonald and Katic Franks	Figure 4.79	LHM
Figure 4.2	Eric MacDonald	Figures 4.80-4.82	Eric MacDonald
Figures 4.3 & 4.4	CMS-JN	Figure 4.83	CHS-JN
Figure 4.5	SBDNL	Figure 4.84	Eric MacDonald and Katic Franks
Figure 4.6	Eric MacDonald	Figure 4.85	Peter M. Mann
Figure 4.7	Eric MacDonald and Katie Franks	Figures 4.86-4.88	Eric MacDonald
Figures 4.8 & 4.9	Eric MacDonald	Figure 4.89	CMS-JN
Figure 4.10	Eric MacDonald and Katie Franks	Figure 4.90	Eric MacDonald
Figure 4.11	Eric MacDonald	Figure 4.91	LHM
Figure 4.12	Eric MacDonald and Katie Franks	Figure 4.92	Eric MacDonald
Figures 4.13-4.20	Eric MacDonald	Figure 4.93	SBDNL
Figures 4.21 & 4.22	CMS-JN	Figure 4.94	CMS-JN
Figures 4.23 & 4.24	Eric MacDonald	Figure 4.95	Eric MacDonald
Figure 4.25	SBD-MIA	Figures 4.96-4.98	SBDNL
Figure 4.26	Eric MacDonald and Katic Franks	Figures 4.99-4.103	Eric MacDonald
Figure 4.27	Eric MacDonald	Figure 4.104	CMS-JN
Figure 4.28	CMS-JN	Figure 4.105	SBDNL
Figures 4.29 & 4.30	SBDNL	Figures 4.106 & 4.10	7.CMS-JN
Figure 4.31	Eric MacDonald and Katie Franks	Figure 4.108	
Figures 4.32-4.37	Eric MacDonald	Figures 4.109 & 4.11	0 . Eric MacDonald
Figures 4.38-4.40	CMS-JN	Figure 4.111	Paul Maleski, Jr.
Figure 4.41	Eric MacDonald and Katie Franks	Figure 4.112	Eric MacDonald
Figures 4.42-4.44	Eric MacDonald	Figure 4.113	SBDNL
Figures 4.45 & 4.46	Eric MacDonald and Katie Franks	Figure 4.114	Eric MacDonald

Figure 4.115	SBDNL
Figures 4.116 & 4.117	
-	Eric MacDonald; derived from Allen G.
·	Noble, Wood, Brick and Stone, vol. 1 (Amherst,
	Mass.: University of Massachusetts Press,
	1984).
Figures 4.119-4.127	.Eric MacDonald
Figure 4.128	
Figure 4.129	Eric MacDonald
Figure 4.130	.CMS-JN
Figures 4.131-4.134	.Eric MacDonald
	CHAPTER 5
Figure 5.0	SBDNL
Figure 5.1	Eric MacDonald
Figure 5.2	.SBD-MIA
Figure 5.3	SBDNL
Figure 5.4	.Eric MacDonald
Figure 5.5	.CMS-JN
Figures 5.6 & 5.7	
Figure 5.8	. Peter M. Mann
Figure 5.9	.Eric MacDonald
Figure 5.10	SBDNL
Figure 5.11	.Eric MacDonald
Figure 5.12	.U.S. Department of Agriculture photograph,
	National Archives and Records Administra-
	tion, Washington, D.C.
Figures 5.13-5.16	.Eric MacDonald
Figure 5.17	SBDNL
Figures 5.18 & 5.19	.CMS-JN
Figures 5.20-5.25	.Eric MacDonald
Figure 5.25	.Eric MacDonald
	Chapter 6
Figure 6.0	.SBD-AF
Figure 6.1	.Eric MacDonald
Figure 6.2	. Max Holden, SBDNL
Figure 6.3	.CMS-JN
Figures 6.4-6.6	.Eric MacDonald
	Chapter 7
Figure 7.0	.CMS-JN
Figures 7.1 & 7.2	.SBD-MIA
Figure 7.3	.Eric MacDonald
Figure 7.4	.CMS-JN
Figures 7.5-7.7	.Eric MacDonald
Figure 7.8	.CMS-JN
Figure 7.9	.SBDNL
Figure 7.10	.Eric MacDonald
Figure 7.11	SBDNL